McCrystie Adams (CO Bar # 34121)

Admitted Pro Hac Vice

Defenders of Wildlife
535 16th Street, Suite 310

Denver, CO 80202

(720) 943-0459

madams@defenders.org

William S. Eubanks II (CO Bar #49410)

Admitted Pro Hac Vice

Meyer Glitzenstein & Eubanks LLP

2601 S. Lemay Avenue

Unit 7-240

Fort Collins, CO 80525

(970) 703-6060

beubanks@meyerglitz.com

Michelle Uberuaga (MT Bar #11611) Law Office of Michelle Uberuaga Z., PLLC P.O. Box 711 Livingston, MT 59047 (406) 223-4714 michelle.uberuaga@gmail.com

Attorneys for Plaintiffs

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA GREAT FALLS DIVISION

DEFENDERS OF WILDLIFE; and)
NATURAL RESOURCES DEFENSE)
COUNCIL,)
) CV-15-14-GF-BMM
Plaintiffs,)
)
v.) FOURTH SUPPLEMENTAL
) AND AMENDED COMPLAINT
UNITED STATES ARMY CORPS OF) FOR DECLARATORY AND
ENGINEERS; UNITED STATES BUREAU) INJUNCTIVE RELIEF

OF RECLAMATION; and UNITED STATES FISH AND WILDLIFE SERVICE,
Defendants,
and
LOWER YELLOWSTONE IRRIGATION PROJECT BOARD OF CONTROL,
SAVAGE IRRIGATION DISTRICT, and INTAKE IRRIGATION DISTRICT,
Defendant-Intervenors.

I. INTRODUCTION

1. The operations of two Montana dams—Fort Peck Dam on the Missouri River and Intake Diversion Dam ("Intake Dam") on the Yellowstone River—are the primary reasons the endangered pallid sturgeon is unable to naturally reproduce in the upper Missouri River basin. The U.S. Army Corps of Engineers ("Corps"), which operates Fort Peck Dam, and the U.S. Bureau of Reclamation ("Reclamation"), which owns and operates Intake Dam, along with the U.S. Fish and Wildlife Service ("FWS"), have repeatedly recognized over the last 25 years that the agencies must modify their operations at these two dams to protect this critically imperiled species and to comply with the Endangered Species Act ("ESA"). Yet, instead of modifying these dams in a way that will restore the

pallid sturgeon's spawning and nursery habitat in manner that would enhance the species' prospects of survival and recovery, the Corps and Reclamation authorized a nearly \$60 million plan to build a larger, more permanent concrete dam to replace the existing loosely piled rock dam at Intake ("the Intake Project" or "Bypass Channel Alternative").

2. This proposal is identical to a proposal the Court enjoined in September 2015 in part because the agencies failed to adequately analyze the project's impacts on the pallid sturgeon and in particular the species' recovery prospects. Nevertheless, in December 2016, the agencies once again authorized the identical Bypass Channel Alternative without answering the crucial questions identified in the Court's injunction order as needing additional analysis. If implemented, this proposal—which is premised upon uncertainties, surmise, and conjecture as to its likelihood of success in bringing much-needed benefits to the sturgeon—virtually ensures the extirpation of wild pallid sturgeon from the upper Missouri River basin. Despite the new decision and accompanying environmental review documents, all three agencies are in continuing violation of federal law in connection with the ongoing operations of Fort Peck Dam and Intake Dam and the authorization of the new concrete dam.

- 3. Pallid sturgeon, one of the largest fish in the Missouri River, are often called "living dinosaurs" because their ancestors date back nearly 78 million years. These prehistoric-looking fish once inhabited more than 3,500 river miles in the Missouri and Mississippi rivers and their major tributaries. Today, the species struggles to survive in isolated pockets of its historic range. In the Missouri River basin, dam-building and other river-altering projects—many of them constructed by the Corps and Reclamation—have dramatically altered the pallid sturgeon's habitat. As a result, the populations remaining in the Missouri River basin are no longer self-sustaining or viable. The species has continued to survive primarily because federal and state agencies release hatchery-raised (i.e., non-wild) pallid sturgeon to prevent local extinctions.
- 4. In the upper Missouri River basin, the most significant pallid sturgeon population lives in the Missouri River between Fort Peck Dam and Lake Sakakawea, and migrates into the Yellowstone River during spawning season. However, fewer than 125 wild pallid sturgeon survive here, all of them nearing the end of their long lifespans. To the extent this population can spawn, their young do not survive.
- 5. This pallid sturgeon population is unable to successfully spawn and produce young that survive to adulthood due to the influence of Fort Peck Dam

operations on the Missouri River and Intake Dam operations on the Yellowstone River. In the mainstem Missouri River, the timing, magnitude, and temperature of water releases from Fort Peck Dam destroy the pallid sturgeon's spawning and nursery habitat, and the dam itself blocks migration upstream. In the Yellowstone, Intake Dam prevents nearly all pallid sturgeon from reaching historic spawning habitat upstream of the dam. Together, the two dams, in conjunction with the Corps' operation of downstream Missouri River dams, make it impossible for pallid sturgeon to naturally reproduce in this area.

- 6. As a result, if these dams continue to operate without modifications that facilitate successful naturally reproducing populations, the loss of the wild population of pallid sturgeon in this area—and therefore within the upper Missouri River basin—is inevitable. In various biological opinions, FWS has predicted that without required modifications to these dams, this population will be extirpated in the very near future.
- 7. The operations of both dams could be modified to make spawning and nursery habitat available again to pallid sturgeon. Indeed, this area is one of FWS's highest priorities for pallid sturgeon recovery throughout the species' entire range because restoration of its spawning and nursery habitat is possible and

because the population in the upper Missouri River basin has not hybridized with other sturgeon species, as it has in the lower Missouri River.

- 8. The ESA imposes individual obligations on each of the defendant federal agencies to avoid causing extirpation of the pallid sturgeon and to provide for its recovery. The Corps is required, by the terms of a "reasonable and prudent alternative" specified in a 2003 Biological Opinion, to test and implement "flow enhancements" at Fort Peck Dam and make other modifications to the dam's operations. Fourteen years later, the Corps has not done so, in contravention of this mandatory measure required by the 2003 Biological Opinion.
- 9. Reclamation, in turn, has been required by law since the pallid sturgeon was listed as endangered in 1990 to engage in a formal ESA consultation with FWS regarding its operation of the existing Intake Dam and its effects on this listed species. Such a consultation should have resulted in a biological opinion prescribing the modifications required to bring Reclamation's operation of the dam into compliance with the ESA. Although FWS requested that Reclamation initiate consultation as early as 1992, Reclamation and FWS never completed a formal consultation on the existing Intake Dam operations before Plaintiffs filed this lawsuit. Instead, on July 10, 2015, Reclamation and FWS completed a formal consultation which examines the continued operation of Intake Dam on pallid

sturgeon for two to three more years while the proposed Intake Project is constructed and the construction and operation of the new dam. In response to this Court's injunction, on November 18, 2016, Reclamation, the Corps, and FWS completed another formal consultation mirroring the July 2015 consultation in relevant respects. Although the operations of the existing Dam have jeopardized the pallid sturgeon for decades, as described in more detail below, neither the July 2015 consultation nor the November 2016 consultation comply with the ESA.

- 10. The most logical means of restoring the river for pallid sturgeon migration and successful natural reproduction would be to remove the existing rock structure that is rebuilt each year. Removal is possible because Intake Dam does not impound any water; its sole purpose is to raise the river elevation to facilitate gravity-fed diversions to an irrigation canal, and these diversions can be accomplished through alternative means.
- 11. Instead of pursuing this straightforward approach, on December 2, 2016, the Corps and Reclamation issued a Record of Decision authorizing the construction of a twelve-foot high concrete dam spanning the width of the Yellowstone River as part of the approximately \$60 million Intake Project. The agencies intend to build an artificial side channel for fish passage around the new dam, while plugging a natural side channel that at least five pallid sturgeon used in

2014 to pass the Dam during a period of high river flows. The agencies' Record of Decision was accompanied by an October 21, 2016 Final Environmental Impact Statement ("EIS") prepared pursuant to the National Environmental Policy Act ("NEPA"); the November 18, 2016 Biological Opinion culminating formal ESA consultation between the Corps, Reclamation, and FWS; and the Corps' final decision pursuant to section 404 of the Clean Water Act ("CWA"), 33 U.S.C. § 1344, providing itself with authorization for the dredge and fill activities involved in the construction of the Intake Project. However, neither the Corps nor Reclamation has ever properly evaluated whether their chosen alternative will succeed in halting the decline of this species and facilitate the restoration of a self-sustaining, viable population, as required under all three statutes.

12. Accordingly, not only are the Corps and Reclamation operating their dams in a manner that precludes pallid sturgeon from successfully reproducing in the wild, the agencies are proposing to build a new, larger barrier in the Yellowstone River that is likely to exacerbate the problem and permanently preclude this species from recovering. The Corps' and Reclamation's ongoing failure to modify their respective operations at Fort Peck Dam and Intake Dam in a way that will facilitate successful natural reproduction violates the ESA in several respects. Meanwhile, FWS has failed to fulfill its own ESA obligations, including

by failing to rely on the best available science, by applying the wrong ESA standards in skewing its analysis of the effects of this project as compared to the environmental baseline and in otherwise determining whether the Intake Project will jeopardize the pallid sturgeon's survival or recovery, and by issuing a legally invalid incidental take statement. In addition, the Corps and Reclamation's authorization of the Intake Project violates NEPA, the ESA, and the CWA. This Fourth Supplemental and Amended Complaint preserves Plaintiffs' existing claims against the agencies' ongoing Intake Dam and Fort Peck Dam operations, preserves Plaintiffs' existing claims regarding certain ongoing legal violations due to the agencies' failure to cure these legal deficiencies in response to this Court's injunction ruling, and responds to the recently completed decision-making processes under NEPA, the ESA, and the CWA by modifying and supplementing Plaintiffs' existing claims as described below.

II. JURISDICTION AND VENUE

13. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 because this lawsuit presents a federal question under the laws of the United States including the ESA, 16 U.S.C. §§ 1531 et seq., NEPA, 42 U.S.C. §§ 4321 et seq., the CWA, 33 U.S.C. §§ 1251 et seq., the APA, 5 U.S.C. §§ 701 et seq., the Declaratory Judgment Act, 28 U.S.C. §§ 2201 et seq., and the Equal Access to

Justice Act, 28 U.S.C. § 2412. This Court also has jurisdiction under 28 U.S.C. § 1346 (United States as a Defendant), the APA, 5 U.S.C. §§ 701 et seq., and 16 U.S.C. § 1540(c) and (g) (action arising under the ESA and its citizen suit provision). Defendants' sovereign immunity is waived pursuant to the ESA, 16 U.S.C. § 1540(g) (ESA claims), or the Administrative Procedure Act ("APA"), 5 U.S.C. § 702 (NEPA and CWA claims and ESA claim against FWS). As required by the APA, Plaintiffs have exhausted all administrative remedies available to them prior to filing suit, and as required by the citizen-suit provision of the ESA, 16 U.S.C. § 1540(g)(2)(A), Plaintiffs provided Defendants with written notice of all ESA violations alleged in this Complaint more than 60 days prior to filing suit. Defendants have not cured their violations of the ESA.

- 14. This Court has authority to grant Plaintiffs' requested relief pursuant to 28 U.S.C. §§ 2201-02 (Declaratory Judgment Act), 16 U.S.C. § 1540 (ESA), and 5 U.S.C. § 706 (APA). An actual controversy, within the meaning of the Declaratory Judgment Act, exists between Plaintiffs and Defendants.
- 15. Venue is proper in the District of Montana pursuant to 16 U.S.C. § 1540(g)(3)(A) and 28 U.S.C. § 1391(e)(1)(B) because a substantial part of the events or omissions giving rise to the violations alleged in this Complaint occurred in this district and the pallid sturgeon affected by the challenged actions are located

in this district. Venue is proper in the Great Falls Division because a substantial part of the ESA violations alleged in this Complaint occurred and are occurring at Fort Peck Dam on the Missouri River and the affected pallid sturgeon are located in the Missouri River for most of the year. The Missouri River forms the southern border of Valley and Roosevelt counties, both of which are within the Great Falls Division. The Corps and Reclamation also identified Roosevelt County as one of the six Montana counties in the "affected area" of the Intake Project.

III. PARTIES

16. Plaintiff DEFENDERS OF WILDLIFE ("Defenders") is a non-profit, membership organization headquartered in Washington, D.C. with field offices throughout the country, including an office in Missoula, Montana. Founded in 1947, Defenders is a science-based conservation organization with more than 393,000 members nationwide, including approximately 1,700 members in Montana. Many of Defenders' members reside within the current and historic range of the pallid sturgeon. Defenders is dedicated to the protection of all native wild animals and plants in their natural communities and the preservation of the habitats on which they depend. Defenders advocates new approaches to wildlife conservation that will help keep species from becoming endangered, and it employs education, litigation, research, legislation, and advocacy to defend

wildlife and their habitat. Defenders is one of the nation's leading advocates for endangered species conservation and has been involved in issues of ESA implementation for more than thirty-five years. Defenders brings this action on its own institutional behalf and on behalf of its members.

- 17. Plaintiff NATURAL RESOURCES DEFENSE COUNCIL ("NRDC") is an international environmental advocacy group organized as a New York not-for-profit membership corporation. NRDC has six U.S. offices, including an office in Bozeman, Montana, and has more than 330,000 members nationwide, many of whom reside within the current or historic range of the pallid sturgeon. NRDC's mission is to "safeguard the Earth: its people, its plants and animals, and the natural systems on which all life depends." Defending endangered wildlife and wild places is one of NRDC's six strategic priorities. NRDC brings this action on its own institutional behalf and on behalf of its members.
- 18. Plaintiffs' members and staff have scientific, aesthetic, recreational, conservation, educational, spiritual, and other interests in the pallid sturgeon and its native habitat in the rivers of the upper Missouri River basin, including the mainstem Missouri River upstream of Lake Sakakawea and the Yellowstone River. Plaintiffs' members have studied fisheries, watershed restoration, and other river management issues in the upper Missouri River basin, including in Montana, and

have concrete plans to continue working on projects relating to the pallid sturgeon and/or other fisheries and river management issues in this basin. Plaintiffs' members and staff also live and/or recreate throughout the upper Missouri River basin. Their recreational activities include fishing and boating trips on the Yellowstone and Missouri rivers. Plaintiffs' members and staff have concrete future plans to continue pursuing all of the above activities in the upper Missouri River basin. Plaintiffs' interests in the pallid sturgeon and its native habitat in the upper Missouri River basin are dependent on the continued existence of a healthy pallid sturgeon population in the wild. Plaintiffs participated and provided extensive comments on the Corps' and Reclamation's March 2014 Draft Supplemental Environmental Assessment for the Intake Project; Plaintiffs also provided extensive comments on the Corps' March 13, 2015 Public Notice regarding the agency's proposed Clean Water Act authorization for the Intake Project. After this Court enjoined Defendants' activities pending further NEPA review and legally required analysis, Plaintiffs again participated and provided extensive comments on the Corps' and Reclamations' Draft Environmental Impact Statement and the Corps' new public notice regarding its Clean Water Act authorization for the Intake Project.

- 19. The legal violations alleged in this complaint cause direct injury to the scientific, aesthetic, recreational, conservation, educational, spiritual, and other interests of Plaintiffs and the members and staff of the plaintiff organizations. These are actual, concrete injuries to Plaintiffs, caused by Defendants' failure to comply with the ESA, NEPA, and CWA, and their implementing regulations and policies. In addition, the agencies' failure to comply with required procedures under the ESA, NEPA, and CWA have caused Plaintiffs and their members and staff procedural injuries. By failing to comply with NEPA, the Corps and Reclamation have harmed Plaintiffs' right to meaningfully participate in the agencies' decision-making process. Unless the requested relief is granted, Plaintiffs' interests will continue to be injured by the Defendants' failure to comply with the ESA, NEPA, and the CWA. The relief sought herein would redress Plaintiffs' injuries. Plaintiffs have no other adequate remedy at law.
- 20. Defendant UNITED STATES ARMY CORPS OF ENGINEERS is a federal agency within the Department of Defense. The Corps operates Fort Peck Dam and Reservoir on the Missouri River and is responsible for ensuring that its operation of the dam is in compliance with all federal laws, including the ESA. Additionally, the Corps is a joint lead agency for the Intake Project and is therefore responsible for ensuring the decision to proceed with this Project complies with all

federal laws, including NEPA and the ESA. The Corps is also responsible, in its regulatory role, for ensuring that the discharge of dredge or fill material associated with the Intake Project complies with the CWA and all implementing regulations.

- 21. Defendant UNITED STATES BUREAU OF RECLAMATION is a federal agency within the U.S. Department of the Interior. Reclamation owns and operates Intake Diversion Dam on the Yellowstone River and is responsible for ensuring that the dam operates in compliance with all federal laws, including the ESA. Additionally, Reclamation is a joint lead agency for the Intake Project and is therefore responsible for ensuring the decision to proceed with this Project complies with all federal laws, including NEPA and the ESA.
- 22. Defendant UNITED STATES FISH AND WILDLIFE SERVICE is a federal agency within the U.S. Department of the Interior. FWS is responsible for administering and implementing the ESA with respect to freshwater fish species such as the pallid sturgeon.

IV. STATUTORY BACKGROUND

A. The Endangered Species Act

23. The ESA was enacted to "provide a program for the conservation of ... endangered species and threatened species" and to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may

be conserved." 16 U.S.C. § 1531(b). Through the ESA, Congress declared its policy "that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of [the Act]." Id. § 1531(c)(1).

- 24. The ESA defines "conserve" as "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to [the ESA] are no longer necessary." Id. § 1532(3). Accordingly, the goal of the ESA is not only to temporarily save endangered and threatened species from extinction, but also to recover these species to the point where they are no longer in danger of extinction, and thus no longer in need of ESA protection.
- 25. Pursuant to the ESA, a species is listed as "endangered" if it is "in danger of extinction throughout all or a significant portion of its range. . . ." <u>Id</u>. § 1532(6). A species is listed as "threatened" if it is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Id. § 1532(20).

1. ESA Section 7(a)(2) Consultation Process

26. Under section 7(a)(2) of the ESA, a federal agency cannot undertake any action that is "likely to jeopardize the continued existence" of any listed

species or cause "destruction or adverse modification" to any designated critical habitat for the species. 16 U.S.C. § 1536(a)(2). An "action" includes "all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies," that are within the agencies' discretionary control. 50 C.F.R. §§ 402.02, 402.03. Because there is no designated critical habitat for pallid sturgeon, the "destruction or adverse modification" standard does not apply in this case.

- 27. To assist federal agencies in complying with their substantive duty to avoid jeopardizing listed species, section 7(a)(2) establishes an interagency consultation requirement. 16 U.S.C. § 1536(a)(2). "If a project is allowed to proceed without substantial compliance with those procedural requirements, there can be no assurance that a violation of the ESA's substantive provisions will not result. The latter, of course, is impermissible." Thomas v. Peterson, 753 F.2d 754, 764 (9th Cir. 1985) (citation omitted).
- 28. To facilitate the consultation process, a federal agency proposing an action that "may affect" a listed species must prepare a document called a "biological assessment." See 16 U.S.C. §§ 1536(a)(2), (c); 50 C.F.R. §§ 402.02, 402.12, 402.14. The agency preparing the biological assessment must use the best scientific and commercial data available. 16 U.S.C. § 1536(a)(2); 50 C.F.R. §

- 402.14(d). In the biological assessment, the action agency evaluates the potential effects of the proposed action on all listed species within the action area identified by the appropriate wildlife agency—here FWS—and determines, in the first instance, whether any listed species is likely to be affected by the proposed action.

 See 16 U.S.C. § 1536(c); 50 C.F.R. §§ 402.02, 402.12, 402.14(d).
- 29. If the proposed action is likely to adversely affect a listed species, the action agency and FWS must engage in formal consultation. 50 C.F.R. § 402.14. At the conclusion of the formal consultation process, FWS provides the action agency with a biological opinion as to whether the action is likely to jeopardize any listed species. See 16 U.S.C. § 1536(b)(3)(A), (4); 50 C.F.R. §§ 402.02, 402.14(g), (h). According to FWS regulations, jeopardy results when it is reasonable to expect that the action would "reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." 50 C.F.R. § 402.02. In conducting its jeopardy analysis, FWS must separately examine whether the action is anticipated to "reduce appreciably the likelihood of" recovery even if FWS determines that the action is not likely to impede the species' ultimate survival. If the action is likely to result in jeopardy to a listed species, the biological opinion must set forth the reasonable and prudent alternatives that would avoid this ESA

violation. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. §§ 402.02, 402.14(h)(3). FWS must use the best scientific and commercial data available in drafting a biological opinion. 16 U.S.C. § 1536(a)(2).

30. Regardless of the conclusion reached by FWS in a biological opinion, the action agency has an independent duty to meet its substantive section 7 obligation to ensure that its actions do not jeopardize listed species. 16 U.S.C. § 1536(a)(2). An action agency violates its substantive section 7 duty if it relies on an inadequate, incomplete, or flawed biological opinion in carrying out an action.

2. ESA Section 9(a)(1)(B) Take Prohibition and Exceptions

- 31. Under section 9 of the ESA, it is unlawful for anyone to "take" a threatened or endangered species of fish or wildlife. 16 U.S.C. §§ 1538(a)(1)(B), (G). Congress broadly defined "take" in the ESA to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Id. § 1532(19). The term "harm" is further defined by regulation to include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 C.F.R. § 17.3.
- 32. Congress created two "incidental take" exceptions to section 9's take prohibition. One of those exceptions allows "incidental take permits" for non-

federal activities that will take listed species. 16 U.S.C. § 1539(a)(1)(B). The other exception provides that, as part of the section 7 consultation process, FWS may provide an "incidental take statement" to a federal action agency only after making a no jeopardy finding or identifying a reasonable and prudent alternative that avoids jeopardy. Id. § 1536(b)(4); 50 C.F.R. §§ 402.14(g)(7), (h)(3)(i). An incidental take statement must (1) specify the impacts on the species, (2) specify the reasonable and prudent measures that FWS considers necessary to minimize such impact, and (3) set forth the terms and conditions that must be complied with by the federal agency to implement these reasonable and prudent measures. 16 U.S.C. § 1536(b)(4). Failure to comply with the mandatory terms and conditions of an incidental take statement renders the agency's action in violation of the ESA section 9 take prohibition.

B. The National Environmental Policy Act

33. NEPA is our "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). Congress enacted NEPA in 1969, directing all federal agencies to assess the environmental impact of proposed actions that significantly affect the quality of the environment. 42 U.S.C. § 4332(2)(C). NEPA's core precept is simple: look before you leap. <u>Id.</u> § 4332(2)(C); 40 C.F.R. §§ 1502.2(f), (g), and 1506.1.

- 34. NEPA has "twin aims." First, it requires federal agencies "to consider every significant aspect of the environmental impact of a proposed action. Second, it ensures that the agency will inform the public that it has indeed considered environmental concerns in its decision-making process." Kern v. BLM, 284 F.3d 1062, 1066 (9th Cir. 2002), quoting Baltimore Gas & Electric Co. v. Natural Res. Def. Council, 462 U.S. 87, 97 (1983). To fulfill these goals, each federal agency must take a "hard look" at the impacts of its actions prior to the point of commitment, so that it does not deprive itself of the ability to "foster excellent action." See 40 C.F.R. 1500.1(c). In this way, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.
- 35. NEPA and its implementing regulations, promulgated by the Council on Environmental Quality, require federal agencies to prepare an Environmental Impact Statement ("EIS") whenever they propose to take a "major federal action" that "may significantly affect the quality of the human environment." 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1508.11; see also 33 C.F.R. §§ 230.1, 230.6; 43 C.F.R. §§ 46.10 et seq.
- 36. An EIS is a "detailed written statement" that "provide[s] full and fair discussion of significant environmental impacts" and "inform[s] decisionmakers

and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. §§ 1502.1, 1508.11. The scope of the EIS is defined by the purposes and mandates of the statutory authority under which the action is proposed. The sufficiency of an EIS must be evaluated with reference to the ESA's requirement to recover listed species. Indeed, NEPA's implementing regulations require that an EIS "shall state how alternatives considered in it and decisions based on it will or will not achieve the requirements of . . . environmental laws and policies" such as the ESA. Id. § 1502.2(d).

37. If an agency is unsure whether a proposed action will have significant environmental effects, it may prepare a shorter document called an "environmental assessment" ("EA") to determine whether the proposed action's impacts are significant and an EIS is required. 40 C.F.R. §§ 1501.4(b); 1508.9. If the EA concludes that a project "may" have a significant impact on the environment, then an EIS must be prepared. See Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1150 (9th Cir. 1998). If not, the federal agency must provide a detailed statement of reasons why the proposed action's impacts are insignificant and issue a finding of no significant impact ("FONSI"). Id. § 1508.13.

- 38. In completing an EIS or an EA, federal agencies must broadly consider the environmental impacts of their actions. Federal agencies must analyze the direct, indirect, and cumulative impacts of proposed actions. 40 C.F.R. §§ 1508.7 & 1508.8. Indirect effects are "caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable." Id. § 1508.8(b). Cumulative impacts include impacts of "other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." Id. § 1508.7.
- 39. NEPA also requires federal agencies to identify and assess "alternatives to the proposed action." 42 U.S.C. § 4332(C)(iii) & (E); see 40 C.F.R. § 1500.2(e). The analysis of the differing environmental impacts of these alternatives is considered the "heart" of the NEPA analysis. Id. § 1502.14.

 Agencies must "[r]igorously explore and objectively evaluate all reasonable alternatives" that serve the purpose and need of the project. Id. § 1502.14(a). This analysis is intended to provide a "clear basis for choice among options by the decisionmaker and the public." Id. § 1502.14. If an agency determines an alternative need not be considered, it must supply a reasonable explanation. Id. § 1502.14(a).

40. Where "an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an [EIS], and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking." 40 C.F.R. § 1502.22. However, the agency must not stop there; rather, "[i]f the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the [EIS]." <u>Id.</u> § 1502.22(a).

C. The Clean Water Act

- 41. The CWA is designed to "restore and maintain the chemical, physical and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The CWA generally prohibits the discharge of pollutants, including dredged or fill material, into the waters of the United States unless authorized by a permit. See id. § 1311(a).
- 42. The term "discharge of fill material" is defined as "the addition of fill material into the waters of the United States" and includes dams, the placement of pilings that have the effect of impairing water flow or otherwise have the effect of a discharge of fill material, and the placement of fill necessary for the construction

of any structure in the waters of the United States. 33 C.F.R. §§ 323.2(f), 323.3(c); 40 C.F.R. § 232.2.

- 43. Section 404 of the CWA authorizes the Corps to issue permits for the discharge of dredge or fill material into waters of the United States. 33 U.S.C. § 1344. Although the Corps does not issue itself a "permit," the Corps authorizes its own discharges of dredge or fill material only if the discharges comply with all substantive requirements of the CWA and other environmental laws. <u>See</u> 33 C.F.R. §§ 335-337.
- 44. The Corps adopted regulations, known as the "public interest" factors, to implement its permitting authority. 33 C.F.R. §§ 320 et seq. "Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process." Id. § 320.4(a)(1). The Corps must consider a broad range of potential relevant impacts as part of its public interest review, including "conservation, economics, aesthetics, general environmental concerns, wetlands,

historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people." <u>Id.</u>

- 45. In addition, the Environmental Protection Agency ("EPA") promulgated regulations, known as the "404(b)(1) Guidelines," for Section 404 permits. 33 U.S.C. § 1344(b)(1); 40 C.F.R. § 230 et seq. The Corps reviews all proposed Section 404 permits under both the Corps' public interest factors and EPA's 404(b)(1) Guidelines. 33 U.S.C. § 1344(b)(1); 33 C.F.R. § 320.2(f). A permit must be denied if it is contrary to the public interest or does not comport with the Section 404(b)(1) Guidelines. 33 C.F.R. §§ 320.4, 323.6; 40 C.F.R. §§ 230.10, 230.12.
- 46. To ensure these mandatory CWA requirements are satisfied, the Corps must fully evaluate the direct, secondary, and cumulative impacts of the activity, including impacts to endangered species, the aquatic environment, fish and wildlife, and human impacts. See, e.g., 33 C.F.R. §§ 320.4(a)(1), 336.1(c)(5) (endangered species), 336.1(c)(8) (fish and wildlife); 40 C.F.R. §§ 230.11(a)- (h), 230.20-23 (aquatic ecosystem), 230.30 (threatened and endangered species),

230.31 (fish and wildlife), 230.51 (recreational and commercial fisheries), 230.52 (water-related recreation), 230.53 (aesthetics). The 404(b)(1) Guidelines also set forth particular restrictions on discharges, described more fully below. 40 C.F.R. §§ 230.10, 230.12. The Corps must set forth its findings in writing on the short-term and long-term effects of the discharge of dredge or fill activities, as well as compliance or non-compliance with the restrictions on discharge. <u>Id</u>. §§ 230.11, 230.12(b).

47. The "loss of values" that the Corps must consider in evaluating the impact of a discharge on the biological characteristics of an aquatic ecosystem includes, with respect to threatened and endangered species, "[t]he impairment or destruction of habitat to which these species are limited . . . includ[ing] adequate good quality water, spawning and maturation areas, nesting areas, protective cover, adequate and reliable food supply, and resting areas for migratory species [which] can be adversely affected by changes in either the normal water conditions for clarity, chemical content, nutrient balance, dissolved oxygen, pH, temperature, salinity, current patterns, circulation and fluctuation, or the physical removal of habitat." 40 C.F.R. § 230.30(b)(2). The Corps must also evaluate whether the discharge could kill individuals of an endangered or threatened species. 40 C.F.R. § 230.30(b)(1).

- 48. EPA's 404(b)(1) Guidelines prohibit the Corps from authorizing an application for dredge and fill activities if, inter alia: (1) the activity "jeopardizes the continued existence" of an endangered species under the ESA (40 C.F.R. §§ 230.10(b)(3), 230.12(a)(3)(ii)); (2) there is a practicable alternative which would have less adverse impact and does not have other significant adverse environmental consequences (40 C.F.R. §§ 230.10(a), 230.12(a)(3)(i)); (3) the discharge will result in significant degradation to waters of the U.S. (40 C.F.R. § 230.10(c), 230.12(a)(3)(ii)); or (4) there does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the Corps' Guidelines for permit issuance. (40 C.F.R. § 230.12(3)(iv)). The Corps must document its findings of compliance or noncompliance with these restrictions. 40 C.F.R. § 230.12(b).
- 49. Practicable alternatives are those alternatives that are "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." 40 C.F.R. § 230.10(a)(2). "The regulations explicitly charge the Corps with taking" these factors into account in evaluating whether there are practicable alternatives. Friends of Earth v. Hintz, 800 F.2d 822, 833 (9th Cir. 1986).

- 50. Whether an alternative is practicable also depends on the weight of the potential harm. See Alameda Water & Sanitation Dist. v. Reilly, 930 F. Supp. 486, 492 (D. Colo. 1996) (upholding EPA determination that practicable alternatives existed even though the record showed "very substantial regulatory and legal obstacles to these alternatives" such as moving an entire town and obtaining a Presidential exemption, because "the impacts [of the proposed project] were much greater" than the impacts of those alternatives).
- 51. "Fundamental to [404(b)(1)] Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern." 40 C.F.R. § 230.1(c).
- 52. The burden of proof to demonstrate compliance with the 404(b)(1) Guidelines rests with the applicant. 40 C.F.R. § 230.1(c); <u>Utahns v. United States</u>

 <u>DOT</u>, 305 F.3d 1152, 1187 (10th Cir. 2002). The Corps must deny a permit where the proposed discharge fails to comply with the Guidelines or there is insufficient information to determine compliance. 40 C.F.R §§ 230.10, 230.12(a).

 The Corps' decision to authorize dredge or fill activities governed by section 404 requires submission of an EA or EIS pursuant to NEPA. 33 C.F.R. § 325.2(a)(4).

The Corps must comply with the requirements of 33 C.F.R. § 325 Appendix B with respect to the environmental procedures and documentation required by NEPA. 33 C.F.R. § 325.2(a)(4).

D. The Administrative Procedure Act

- 53. Because NEPA does not contain an internal "citizen suit" provision, the APA governs the scope and standard of review of Plaintiffs' NEPA claim against the Corps and Reclamation. The APA confers a right of judicial review on any person adversely affected by final agency action, and provides for a waiver of the federal government's sovereign immunity. 5 U.S.C. § 701-706.
- 54. Unlike NEPA, the ESA does contain a citizen suit provision, but it does not specify any standard of review. Accordingly, for Plaintiffs' ESA claims against the Corps and Reclamation, the APA governs the standard of review, but not the scope of review. The right of judicial review and waiver of sovereign immunity for these claims is found in the ESA citizen-suit provision, 16 U.S.C. § 1540(c) and (g). Although the CWA does contain a citizen suit provision, that provision does not govern suits brought to challenge a decision made by the Corps in its capacity as a regulatory entity authorizing a discharge under section 404. See 33 U.S.C. § 1365(a). Consequently, the APA also governs the scope and standard of review for Plaintiffs' CWA claim against the Corps. Similarly, though the ESA

does contain a citizen suit provision, that provision does not govern suits against FWS challenging its discretionary actions under the ESA such as the issuance of biological opinions. See Bennett v. Spear, 520 U.S. 154, 156 (1997) (challenges to FWS's biological opinions are brought pursuant to APA). Accordingly, the APA governs the scope and standard of review for Plaintiffs' ESA claim concerning FWS's biological opinion for the Intake Project.

55. Upon review of agency action under the APA, the court shall "hold unlawful and set aside actions . . . found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." Id. § 706(2). An action is arbitrary and capricious "if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

V. FACTUAL BACKGROUND

A. The Pallid Sturgeon

56. The pallid sturgeon is an ancient fish native to the Missouri and Mississippi river basins. Pallid sturgeon, like other sturgeon species, are often

called "living dinosaurs." Fossilized sturgeon dating back 78 million years suggest that ancestors of the contemporary pallid sturgeon co-existed with dinosaurs during the Cretaceous period of the Mesozoic era.

57. Pallid sturgeon also appear pre-historic. They have a flattened snout, long slender tail, and are armored with lengthwise rows of bony plates. They are one of the largest fish in the Missouri and Mississippi river basins. Pallid sturgeon weigh up to 80 pounds, and can grow six feet long. Pallid sturgeon are also long-lived, with some individuals surviving 50 years or more.

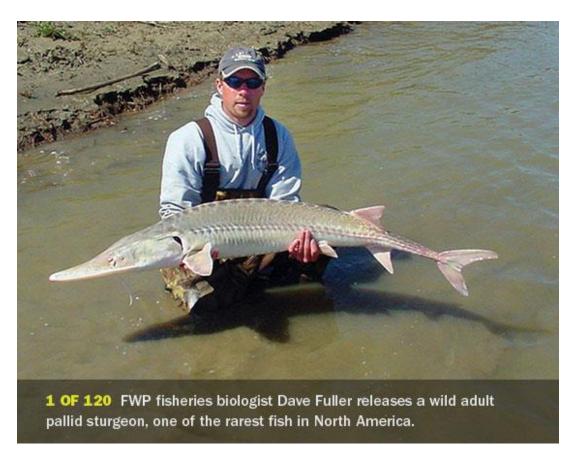


Photo and caption credit: Montana Fish, Wildlife and Parks, "Yellow Light on the Yellowstone," May-June 2013 issue

- 58. Pallid sturgeon are warm-water fish that live in swift water close to the bottom of large, silty, free-flowing rivers that still have conditions resembling a natural hydrograph. In the Missouri River, the natural hydrograph historically varied widely from year to year, but typically involved peak flows in March and April as a result of snowmelt from the Plains, declining flows in May, higher peak flows in June as a result of snowmelt from the Rocky Mountains and summer rainfall, and declining flows through summer and fall. The Missouri River and its tributaries were historically in a constant state of change. Backwaters, sloughs, chutes, islands, sandbars, floodplains, and main channel waters created a diversity of habitats. The Missouri was also sediment-laden, earning the nickname "Big Muddy."
- 59. Pallid sturgeon generally spawn between March and July. Pallid sturgeon in the northern portions of their range, including Montana, likely spawn in late May or early June. Female pallid sturgeon migrate upstream to spawn, apparently in response to spawning cues such as warmer water and higher flows.
- 60. Once hatched, pallid sturgeon free embryos and larvae (hereinafter, "larvae") passively drift 152 to 329 miles, depending on river bottom complexity, water velocity and temperature. Larvae drift along the bottom of the river. In the Missouri River, in the transition zone between flowing river habitat and the still-

water reservoirs operated by the Corps, there is an oxygen-depleted "dead zone" at the bottom of the river. Pallid sturgeon larvae perish if they reach this dead zone before they are mature enough to swim on their own. Thus, for the larvae to survive there must be a sufficient length of intact river habitat for them to mature before they drift into the reservoirs.

- 61. Pallid sturgeon were once found in approximately 3,515 river miles throughout the Missouri and Mississippi river basins. They lived in the Missouri River from Great Falls, Montana, to the Missouri River's confluence with the Mississippi. Pallid sturgeon also lived in the Missouri River's larger tributaries, including the Yellowstone, Tongue, Milk, Niobrara, Platte, Kansas, and Big Sioux rivers. In the Mississippi River basin, the pallid sturgeon's range in the mainstem stretched from Keokuk, Iowa, to New Orleans, Louisiana, and included the lower reaches of some of the larger tributaries.
- 62. Virtually all of the pallid sturgeon's habitat in its historic range has been drastically altered by more than a century of dam-building, channelization, and stabilization projects many of them constructed by the Corps and Reclamation. On the Missouri River mainstem, among other projects, the Corps operates a system of six major dams and reservoirs. These dams include Fort Peck Dam, which created Fort Peck Lake, and Garrison Dam, which created Lake

Sakakawea. The dams converted a free-flowing, dynamic river into a controlled system dominated by lakes and still water conditions. The Corps' six major dams converted approximately 36 percent of the Missouri River mainstem into lakes.

Another 40 percent of the river has been channelized. The remaining 24 percent of free-flowing river has been dramatically altered by the changed temperatures and flows caused by dam operations.

- 63. The impacts to pallid sturgeon have been profound. The Corps' Missouri River dams, including Fort Peck Dam, block pallid sturgeon migrations to spawning and feeding areas and eliminate migration between different stretches of river, thereby limiting genetic exchange and preventing the species from recolonizing areas where it has been extirpated. In addition, the operation of these dams substantially alters the natural hydrograph and creates river conditions generally unsuitable for pallid sturgeon. For example, dam operations reduce the suitable habitat available for larvae to drift, create oxygen deprived "dead zones" which kill larvae, affect spawning cues for adults, change downstream temperatures, alter conditions and flows in spawning and feeding areas, reduce food sources, and reduce sediment.
- 64. The wild pallid sturgeon population is no longer self-sustaining or viable. There is little evidence of successful reproduction—including both

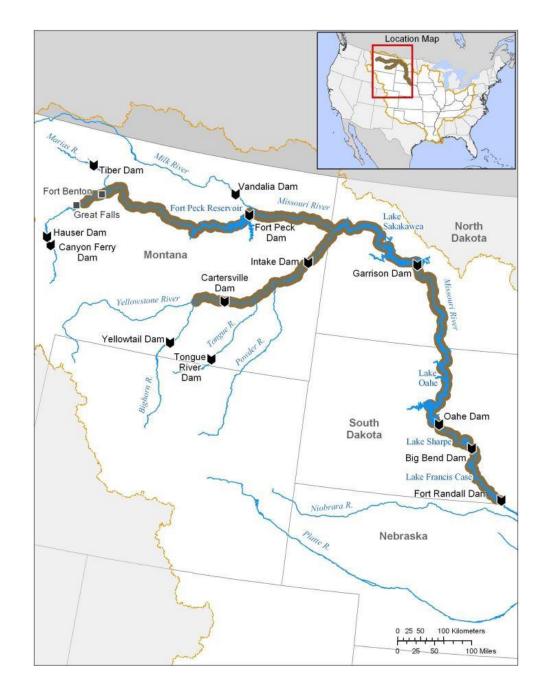
spawning and "recruitment," meaning the survival of young pallid sturgeon to adulthood—in the wild. Federal and state agencies release hatchery-raised fish to prevent local extinctions and sustain the population.

65. Primarily as a result of the pallid sturgeon's apparent inability to spawn and "recruit" in the wild, FWS listed the pallid sturgeon as an "endangered" species on September 6, 1990. 55 Fed. Reg. 36,641. The "endangered" listing means that the pallid sturgeon is in danger of extinction throughout all or a significant portion of its range. See 16 U.S.C. § 1532(6) (defining endangered species). FWS attributed the lack of natural reproduction primarily to the dramatic habitat changes created by dam-building, altered flow regimes, stabilization, and channelization projects in the species' historic range.

B. The Pallid Sturgeon in the Upper Missouri River Basin

- 66. The upper Missouri River basin includes the Missouri River and its tributaries from the headwaters of the river near Three Forks, Montana, to Fort Randall Dam near Pickstown, South Dakota.
- 67. The most significant population of pallid sturgeon in the upper Missouri basin lives in the mainstem Missouri River between Fort Peck Dam and Lake Sakakawea during the fall and winter months and typically migrates into the Yellowstone River each spring in an attempt to spawn. Lake Sakakawea is a

reservoir formed by Garrison Dam near Williston, North Dakota. The Yellowstone meets the Missouri River near the North Dakota border, between Fort Peck Dam and Lake Sakakawea. By water volume it is the largest tributary to the Missouri River. The Yellowstone is often referred to as the longest undammed river in the continental United States. However, there are six diversion dams on the river, including Intake Dam. These diversion dams do not impound water or create reservoirs, but do act as an impediment to the natural movements of many fish species, including pallid sturgeon.



Map of the upper Missouri River basin. The Great Plains Management Unit is highlighted in brown and is discussed below. U.S. Fish and Wildlife Service, *Revised Recovery Plan for the Pallid Sturgeon*, January 2014, at 50 (Figure 7).

68. This population is the largest identified wild population of pallid sturgeon remaining. However, as of January 2014, this population had dwindled to

approximately 125 wild pallid sturgeon, from an estimated population of 968 in 1969. The wild individuals in this population are nearing the end of their lives. While there has been limited documented spawning success, there is no evidence that any pallid sturgeon born in the wild in this area have survived to adulthood over the last several decades.

- 69. The pallid sturgeon population in this area is currently only sustained by the release of hatchery-raised fish. This program of artificial population augmentation is a stop-gap measure designed to prevent the extirpation of this population. While the hatchery release program is clearly important in the short-term, it may have substantial negative effects over the long-term. Absent restoration of the pallid sturgeon's habitat to the point that they can spawn and survive to adulthood in the wild, the species cannot recover and will be perpetually dependent on hatcheries for continued survival.
- 70. Although the wild pallid sturgeon population is declining, the Missouri and Yellowstone rivers in Montana and western North Dakota are still considered among the most important areas for recovery of the pallid sturgeon. In 2006, FWS's pallid sturgeon recovery team created four "Management Units." These Management Units were chosen because they were currently occupied by pallid sturgeon, and they generally contain the least degraded habitat in the pallid

sturgeon's historic range. One of these four management units, the "Great Plains Management Unit," includes the population of pallid sturgeon between Fort Peck Dam and Lake Sakakawea that migrates between the Missouri and Yellowstone rivers.

- 71. The Yellowstone River has some of the best pallid sturgeon habitat remaining in the upper Missouri River basin. The Yellowstone River upstream of Intake Dam contains intact pallid sturgeon spawning habitat. The Yellowstone River also maintains a hydrograph that is similar to its historic pattern. As described below, the Missouri River's spawning and nursery habitat likely can be restored if suitable flows are released from Fort Peck, water temperatures are modified, and water levels are modified at Lake Sakakawea. In addition, pallid sturgeon have spawned successfully in the Missouri River when higher than normal flows were released.
- 72. Not only is this population in an area prioritized for recovery, it is one of the last "heritage" populations of pallid sturgeon. "Heritage" fish are those that were spawned and grew to adulthood in the wild, rather than being raised in hatcheries, and, unlike the pallid sturgeon in lower reaches of the Missouri and Mississippi rivers, have not naturally hybridized with the closely-related shovelnose sturgeon.

- 73. There are only two other small populations of pallid sturgeon in the upper Missouri River basin. One is upstream of Fort Peck Dam. This population is isolated from other populations by Fort Peck Dam and has only a few wild fish remaining. In 1995, there were an estimated 45 wild pallid sturgeon in the mainstem Missouri River upstream of Fort Peck Reservoir, but current estimates suggest there are far fewer fish left there today. Scientists counted only three wild pallid sturgeon upstream of Fort Peck Reservoir between 2007 and 2013.

 According to FWS, there may also be "some" pallid sturgeon persisting downstream of Lake Sakakawea, but this population is also likely unable to successfully reproduce.
- 74. The likely extirpation of the pallid sturgeon from all other reaches of the upper Missouri River basin places added importance on the survival and recovery of the population of pallid sturgeon between the Fort Peck Dam and Lake Sakakawea.

C. The Operations of Fort Peck Dam and Intake Dam and Their Effects on Pallid Sturgeon

75. Pallid sturgeon are unable to successfully reproduce in Montana and western North Dakota primarily due to the influence of two dams: Fort Peck Dam on the mainstem Missouri River and Intake Dam on the Yellowstone River. Each

presents a different impediment to spawning and recruitment. Together, they make it impossible for pallid sturgeon to naturally reproduce in this area.

1. Fort Peck Dam on the Missouri River

76. Fort Peck Dam is located on the Missouri River in northeastern Montana, near the town of Glasgow and adjacent to the community of Fort Peck. It is the farthest upstream of the six major dams operated by the Corps on the Missouri River. Fort Peck Dam impounds Fort Peck Lake, the fifth-largest manmade lake in the United States. Fort Peck Dam was completed in 1940.



Fort Peck Dam and Fort Peck Lake, March 24, 2015. *Photo credit: McCrystie Adams*

- 77. The Corps has discretionary authority over the operations of all six mainstem Missouri River dams, including Fort Peck Dam, for multiple purposes, including flood control, irrigation, navigation, recreation, fish and wildlife conservation, municipal water supply, water quality control, and power generation.
- 78. As with all of the major dams on the Missouri River, Fort Peck Dam blocks all pallid sturgeon migration. In addition, the operation of Fort Peck Dam dramatically changed the natural hydrograph of the Missouri River and pallid sturgeon habitat downstream. Specifically, water releases from Fort Peck Dam destroy pallid sturgeon spawning and nursery habitat. These water releases are generally too cold for successful spawning and too clear for young pallid sturgeon to avoid predation from larger fish. As a result, under typical Fort Peck Dam operations, pallid sturgeon are unable to successfully spawn in the reach of the mainstem Missouri River between Fort Peck Dam and Lake Sakakawea.
- 79. Pallid sturgeon that are unable to spawn in the mainstem Missouri River below Fort Peck Dam typically migrate into the Yellowstone River. However, Intake Dam blocks nearly all pallid sturgeon from reaching their historic spawning grounds upstream of the dam, and thus prevents them from successfully reproducing in the Yellowstone as well.

2. Intake Dam on the Yellowstone River

80. Intake Dam is located on the Yellowstone River, 70 miles upstream of the Yellowstone's confluence with the Missouri River and 17 miles north of Glendive, Montana. Intake Dam is a timber and rock weir designed to raise the river water level and facilitate water diversions through a canal system for irrigation of approximately 54,000 acres in Montana and North Dakota. Intake Dam does not impound water in a reservoir.



Intake Dam, March 24, 2015. Photo credit: Jay Tutchton

81. Reclamation owns and operates Intake Dam as part of the Lower Yellowstone Project. Reclamation has discretionary authority over the existence and operation of the dam.

- 82. Reclamation's Intake Dam operations include elevation of the surface of the Yellowstone River; the diversion of water from the Yellowstone River into the main diversion canal; conveyance of diverted water through Lower Yellowstone Project canals, laterals, and drains; and maintenance of the facilities. Maintenance activities in most years include the placement of 1-2 feet of rock or other fill material on the crest of the dam to replace rock or fill material that has eroded or migrated downstream as a result of high flows in spring or ice flows in winter. Intake Dam has been in operation since 1909.
- 83. Intake Dam creates an impassable barrier to nearly all pallid sturgeon. Intake Dam blocks pallid sturgeon from reaching approximately 165 miles of historic spawning habitat upstream of the dam. The relatively natural flow and temperature conditions in this 165-mile upstream stretch of the Yellowstone River offers some of the best intact pallid sturgeon spawning and nursery habitat left in the upper Missouri River basin.
- 84. Even if pallid sturgeon occasionally are able to reach these spawning grounds, Intake Dam may provide a lethal barrier for the larvae drifting downstream. Intake Dam also potentially presents a barrier for juvenile or adult pallid sturgeon returning downstream, when water levels are lower.

- 85. For example, in 2014, five pallid sturgeon managed to pass upstream of Intake Dam by using a natural side channel around the dam during high water flows. One of those five, a female, spawned upstream of Intake Dam in the Powder River, a tributary to the Yellowstone. After spawning, all of the fish returned to the Yellowstone River.
- 86. Similarly, juvenile pallid sturgeon released upstream of diversion dams on the Yellowstone did not move downstream past the first dam they encountered, including Intake Dam.
- 87. Because most pallid sturgeon are unable to pass Intake Dam, pallid sturgeon apparently attempt to spawn downstream of the dam, approximately 6-9 miles from the confluence of the Yellowstone and Missouri rivers. This location is too close to Lake Sakakawea for larvae to survive. Larval pallid sturgeon spawned in the Yellowstone River downstream of Intake Dam drift into Lake Sakakawea and die from starvation, suffocation in the oxygen deprived "dead zone" where the river enters the reservoir, or are consumed by predators who are able to locate the larvae as a result of the clear water conditions created by the Corps' dam operations. Indeed, a recent study by the United States Geological Service established that the Corps' management of Missouri River reservoirs, including Lake Sakakawea, creates oxygen-depleted "dead zones" that immediately suffocate

pallid sturgeon larvae passing from the flowing river into the Corps' still-water reservoirs.

3. Potential for Habitat Restoration with Dam Modifications

- 88. Although the operations of Fort Peck Dam and Intake Dam currently prevent the pallid sturgeon from successfully reproducing, recent events have confirmed that pallid sturgeon can and will use the habitat in the Missouri and Yellowstone rivers if this habitat is restored and made available.
- 89. For example, in 2011, due to a high snowpack, Fort Peck Dam's water releases were much higher than normal. The Milk River, a major tributary to the Missouri downstream of Fort Peck Dam, also had historically high flows in 2011. A far higher than normal number of pallid sturgeon remained in the mainstem Missouri River as a result and migrated upstream past the Yellowstone River during spawning season. Some of these individuals successfully spawned. There is no evidence their larvae survived. However, this event marked the first time spawning has been documented downstream of Fort Peck Dam in the mainstem Missouri River since the dam's construction. Accordingly, it confirms that suitable spawning habitat exists in this reach of the mainstem Missouri and that pallid sturgeon will use it if flow conditions are modified.

- 90. Recent scientific studies indicate that larval pallid sturgeon, released into the Missouri River 11-17 days post-hatch, can survive beyond one year of life in the River downstream of Fort Peck Dam. Thus, if sufficient drift distances are provided, the Missouri River provides suitable conditions for survival, feeding, and growth of larval pallid sturgeon. In addition, the best available pallid sturgeon habitat suitability models suggest that modifications to flows and temperature from Fort Peck Dam in combination with modified water levels at Lake Sakakawea could support the growth and survival of larval pallid sturgeon.
- 91. FWS has also concluded that there is suitable spawning habitat upstream of Intake Dam on the Yellowstone River. The Yellowstone has not been altered as extensively by bank stabilization projects as other rivers in the Missouri River basin and still maintains some semblance of the natural hydrograph. Indeed, in 2014, one of the five pallid sturgeon that managed to pass upstream of Intake Dam by using a natural side channel spawned upstream of the dam.

D. The 2000 and 2003 Biological Opinions on the Corps' Fort Peck Dam Operations

92. After the pallid sturgeon was listed as an endangered species in 1990, FWS advised the Corps several times that it must consult under section 7(a)(2) of the ESA regarding the effects of its Missouri River dam and reservoir operations on the pallid sturgeon.

- 93. The Corps and FWS did not complete a formal section 7(a)(2) consultation on these effects for ten years. In 2000, a decade after their legal obligations arose, FWS and the Corps finally completed consultation and FWS issued a biological opinion. This 2000 Biological Opinion addressed the effects of the Corps' operation of the Missouri River Main Stem Reservoir System, operation and maintenance of the Missouri River Bank Stabilization and Navigation Project, and operation of the Kansas River Reservoir System.
 - 1. FWS's "Jeopardy" Analyses and Reasonable and Prudent Alternatives in the 2000 and 2003 Biological Opinions
- 94. In the 2000 Biological Opinion, FWS concluded that the Corps' Missouri River mainstem dam and reservoir operations, including Fort Peck Dam operations, cause "jeopardy" to the pallid sturgeon in violation of section 7(a)(2) of the ESA. Indeed, FWS predicted in the 2000 Biological Opinion that the Corps' Missouri River dam operations and bank stabilization projects would cause the extirpation of the species from the Missouri River.
- 95. As required by the ESA when FWS issues a "jeopardy" biological opinion, FWS identified a "reasonable and prudent alternative" in the 2000 Biological Opinion that would avoid this ESA violation. A "reasonable and prudent alternative," or "RPA," is an action or set of actions identified by FWS and/or the action agency that the action agency can take that would avoid causing

jeopardy to a species. The RPA for the pallid sturgeon in the 2000 Biological Opinion required the Corps, among other things, to release larger and warmer flows from Fort Peck Dam in the spring and warmer flows over the summer in order to provide the conditions necessary for pallid sturgeon spawning and nursery habitat. If all aspects of this reasonable and prudent alternative were implemented, FWS concluded that the Corps' operation of the Missouri River dams and reservoirs would not "jeopardize" the pallid sturgeon.

- 96. Between 2000 and 2003, the Corps failed to implement the elements of the reasonable and prudent alternative for pallid sturgeon related to the Corps' Fort Peck Dam operations in the 2000 Biological Opinion.
- 97. In 2003, the Corps re-initiated consultation with FWS and requested that the reasonable and prudent alternative in the 2000 Biological Opinion be modified in certain respects. The Corps requested, among other things, that the full implementation of the Fort Peck Dam flow changes be eliminated.
- 98. In response, in 2003, FWS issued an Amended Biological Opinion. The 2003 Biological Opinion concluded that the Corps' new proposed action and proposed reasonable and prudent alternative would still jeopardize the pallid sturgeon. FWS also concluded, as it had in 2000, that the Corps' Missouri River dam and reservoir operations, including Fort Peck Dam operations, "jeopardize"

the pallid sturgeon. Among other things, FWS reiterated that water released from Fort Peck Dam destroys the conditions necessary for pallid sturgeon spawning and nursery habitat in the Missouri River. The 2003 Biological Opinion superseded the 2000 Biological Opinion.

- 99. In the 2003 Biological Opinion, FWS issued a new reasonable and prudent alternative that would avoid jeopardy to the pallid sturgeon. The 2003 reasonable and prudent alternative maintained some elements of the 2000 reasonable and prudent alternative and modified others. FWS rejected the Corps' request to eliminate the requirement to test and implement flow modifications from Fort Peck Dam. FWS concluded that the Corps' operations would not jeopardize the pallid sturgeon if it implemented all of the elements of the 2003 reasonable and prudent alternative.
- 100. The reasonable and prudent alternative specific to the pallid sturgeon in the 2003 Biological Opinion includes nine elements. Three of these elements require studies, tests, or changes to the operation of Fort Peck Dam: elements II, VII, and VIII.
- 101. RPA II for the pallid sturgeon requires the Corps to implement "unbalanced intrasystem regulation" of Fort Peck Lake, Lake Sakakawea, and Lake Oahe, a Corps-operated reservoir downstream. Purposeful "unbalancing"

would require higher-than-normal releases every three years from Fort Peck Dam, which would more closely mimic natural spring flows and provide spawning cues, enhance backwaters, and scour vegetation to the benefit of the pallid sturgeon.

- 102. The Corps has not implemented the "unbalanced intrasystem regulation" required by RPA II of the 2003 Biological Opinion.
- implement "flow enhancements" from Fort Peck Dam. These "flow enhancements" would involve seasonally higher and warmer flows in the spring to provide spawning cues and warmer summer flows to maintain nursery habitats. FWS anticipated that the flow enhancements would be needed only one out of every three years. RPA VII also requires the Corps to implement the "system unbalancing" in RPA II in a certain sequence. FWS required the Corps to achieve these flow enhancements by the time Fort Peck's 2004 operations began in March, 2004.
- 104. FWS noted in the 2003 Biological Opinion that time was of the essence for implementation of the reasonable and prudent alternative in order to protect pallid sturgeon. For example, FWS stated that "[i]nformation gained from experience during the last 13 years reinforces the need for immediate adoption" of all RPA elements. Further, FWS predicted that a "substantial delay in

implementing the Fort Peck [flow] tests will have adverse effects on pallid sturgeon in this reach." Indeed, FWS concluded in a 2003 Biological Opinion that if the Corps failed to implement the flow enhancements at Fort Peck Dam specified in RPA VII, the wild population of pallid sturgeon that lives in the upper Missouri River basin in the mainstem Missouri between Fort Peck Dam and Lake Sakakawea and in the Yellowstone River would likely be extirpated by 2018.

- 105. Nonetheless, the Corps has not tested nor implemented the "flow enhancements" at Fort Peck Dam required by RPA VII of the 2003 Biological Opinion.
- 106. RPA VIII requires the Corps to prepare a study within three years that evaluates the feasibility of constructing a temperature control device on the upstream face of Fort Peck Dam. FWS required the Corps to implement such a device if an outside engineering peer review of the study concluded that the device is technically feasible and is a cost effective action to provide warmer water temperatures through the summer while continuing to provide hydropower. Such a device, if feasible, would provide the Corps with flexibility to improve conditions downstream for the pallid sturgeon while maintaining its hydropower production. FWS required the Corps to complete the study within 3 years.

- 107. The Corps utilized an outside engineering firm to complete a "Fort Peck Temperature Control Device Reconnaissance Study." The initial study was not completed until 2009. Six potentially viable alternatives were identified. One of these potential alternatives was cost effective and could be implemented immediately. No further action has been taken to modify water temperatures from Fort Peck Dam. The study recommended a feasibility study be completed to review the six recommended alternatives in detail. In 2012, a document entitled "Water Temperature Study and Preliminary Design of Submerged Weir" was completed. To the extent the Corps has completed a peer review of a feasibility study, as required by RPA VIII, the agency has not made it public. The Corps has not implemented a temperature control device at Fort Peck Dam.
- 108. Because the Corps has failed to implement the required RPA elements, the Corps' operation of Fort Peck Dam "jeopardizes" the pallid sturgeon.

2. FWS's "Take" Analysis and Incidental Take Statement

- 109. FWS also concluded in the 2003 Biological Opinion that the Corps' operation of Fort Peck Dam "takes" pallid sturgeon in violation of ESA section 9.
- 110. According to FWS, Fort Peck Dam operations cause "take" in several ways. For example, Fort Peck Dam operations cause "[1]oss of spawning cues from the significantly altered hydrography, and reduced temperatures during [the]

spawning period;" "[m]ortalities of early life stages from reduced water temperatures, shortened river segments reducing larval drift distance, high velocities, and reduced forage;" and "[l]oss of quantity and quality of spawning and nursery habitat because of significantly reduced sediment transport and deposition."

- 111. FWS concluded that the level of take caused by Fort Peck Dam was unquantifiable. However, FWS also noted that "[i]ncidental take at a level which would not allow the pallid sturgeon to naturally reproduce, recruit and survive in the wild in the pallid sturgeon recovery priority areas is unacceptable." At the time of the 2003 Biological Opinion, the reach of the Missouri River between Fort Peck Dam and Lake Sakakawea, including the Yellowstone River, was designated as a "pallid sturgeon recovery priority area." FWS has since modified the number and scope of the recovery priority areas and no longer uses "recovery priority area" as a descriptive term. However, the same area of the Missouri and Yellowstone rivers is now included within the Great Plains Management Unit, one of the four "management units" designated as the highest priority areas for pallid sturgeon recovery.
- 112. Today, because the Corps has never implemented the reasonable and prudent alternative specified in the 2003 Biological Opinion, Fort Peck Dam

operations are causing exactly the level of take that FWS deemed "unacceptable" in 2003: pallid sturgeon are currently unable to "naturally reproduce, recruit and survive in the wild" downstream of Fort Peck Dam.

- 113. In its 2003 Biological Opinion, FWS provided the Corps with an Incidental Take Statement ("ITS") that would exempt the Corps from liability for its take of pallid sturgeon if the Corps implemented the RPA elements relevant to the pallid sturgeon. The ITS was premised on the Corps' implementation of all the RPA elements within "approximately 5-10 years."
- 114. Absent the implementation of the RPA elements, the ITS is not operative and does not protect the Corps from take liability. Absent a valid incidental take permit, the Corps is taking pallid sturgeon at Fort Peck Dam in violation of ESA section 9.
 - E. Reclamation's Current Operation of Intake Dam and Failure to Comply with the ESA
- 115. Just as the Corps was required to formally consult under ESA section 7(a)(2) with FWS regarding its Fort Peck Dam operations, Reclamation was required to formally consult under ESA section 7(a)(2) with FWS regarding its Intake Dam operations and the modifications needed to successfully restore pallid sturgeon passage at the dam and avoid causing jeopardy to the species.

- 116. FWS notified Reclamation at least as early as 1992 that Reclamation must consult under ESA section 7(a)(2) regarding Reclamation's operation of Intake Dam and the Dam's effects on the pallid sturgeon, which was listed as endangered in 1990. In response, Reclamation initiated, but never completed, consultation with FWS regarding its Intake Dam operations at various times over the next twenty-three years. Finally, on July 10, 2015, Reclamation and FWS completed a formal ESA section 7 consultation regarding Reclamation's operation of Intake Dam. This consultation examined the effects of the operation and maintenance of the existing Intake Dam for the next two to three years and the effects of the proposed Intake Project. As described in more detail below, the consultation did not properly analyze the potential for either the current situation, where the existing Dam is "re-built" most years by adding tons of new rock to replace that eroded away by the River, or the new proposed dam to jeopardize the continued existence of the pallid sturgeon.
- 117. FWS's 2015 Biological Opinion that it issued to Reclamation did not fulfill Reclamation's substantive ESA section 7 duty to ensure that its current Dam operations of the Dam do not cause jeopardy because the best available science demonstrates that Reclamation's current operation of the existing Intake Dam is causing jeopardy to the pallid sturgeon. As of the date of this Complaint,

Reclamation is also "taking" pallid sturgeon through its current Intake Dam operations. By blocking pallid sturgeon from reaching historic spawning grounds that would provide sufficient drift distances for the larvae to survive to adulthood, Reclamation's operations are interfering with the pallid sturgeon's "breeding, feeding, and sheltering," which constitutes take under the ESA and its regulations. 50 C.F.R. § 17.3.

- 118. In connection with the July 10, 2015 Biological Opinion, FWS issued Reclamation an incidental take statement for its current operation of Intake Dam. However, this biological opinion and incidental take statement failed to comply with the ESA and was otherwise arbitrary and capricious. Absent a valid incidental take permit, Reclamation is taking pallid sturgeon at Intake Dam in violation of ESA section 9.
 - F. The Now-Abandoned "Amendments" to the 2003 Biological Opinion Allowing the Substitution of Intake Dam Modifications in Place of Fort Peck Dam Modifications
- 119. In 2009, at the Corps' request, the ESA obligations of the Corps and Reclamation became intertwined. The Corps sought permission from FWS to assist Reclamation in modifying Intake Dam operations to allow for pallid sturgeon passage—if FWS would eliminate the Corps' own ESA obligations at Fort Peck Dam. In doing so, the Corps tacitly admitted that it had no intention of

implementing the RPA elements in the 2003 Biological Opinion relevant to pallid sturgeon and its Fort Peck Dam operations, which the Corps had unlawfully avoided implementing since 2003. Rather than reinitiating formal section 7 consultation to consider whether this substitution comports with the ESA, the Corps and FWS agreed to informally "amend," by an exchange of letters, RPA VII from the 2003 Biological Opinion. The agencies exchanged subsequent letters further "amending" and "clarifying" the Corps' obligations vis-à-vis assisting Reclamation in modifying its Intake Dam operations in exchange for the Corps taking no action with respect to Fort Peck Dam to benefit pallid sturgeon.

120. In 2016—as part of formal consultation between the Corps,
Reclamation, and FWS described in more detail below—the Corps rescinded its
prior request to substitute its involvement with Intake Dam modification for its
ESA obligations arising from RPA VII in the 2003 Biological Opinion. In so
doing, the Corps recognized that the Corps' involvement with the Intake Project is
"independent from the 2003 biological opinion and the consultation that is now
occurring on the Missouri [River]." As a result, the Corps maintains separate,
independent ESA obligations with respect to its ongoing Fort Peck Dam operations
and its involvement with Intake Project.

- G. The Corps' and Reclamation's April 1, 2015 Adoption of the "Bypass Channel Alternative"
- 121. On April 1, 2015, the Corps and Reclamation authorized the implementation of the "Bypass Channel Alternative" to provide "fish passage" at Intake Dam. The agencies announced this decision through a FONSI that became publicly available on April 13, 2015. The Corps and Reclamation also prepared a "Final Supplement to the 2010 Final Environmental Assessment" ("2015 Final Supplemental EA") and accompanying appendices.
- Alternative would require the construction of a larger, more permanent concrete dam (also called a "weir") in place of the existing rock structure at Intake. The new concrete dam will block pallid sturgeon from migrating upstream. To address the fact that the dam, like the existing structure, will block pallid sturgeon migration, spawning, and "recruitment," the agencies planned to build an artificial bypass channel around the new dam. As planned, the artificial bypass channel would have extended more than 2 miles, required the excavation of 1.2 million cubic yards of earthen material, and required 65,000 tons of riprap to stabilize some of the banks. The agencies also plan to "plug" the natural side channel that was used by at least five pallid sturgeon in 2014. Once the natural side channel is

plugged, it would not be useable by pallid sturgeon or other fish for passage. The agencies' preliminary cost estimate for the Intake Project was \$58.9 million.

- Reclamation are joint lead agencies for the Intake Project. The Corps is authorized by Section 3109 of the 2007 Water Resources Development Act, Pub. L. 110-114, 121 Stat. 1041, to use funding from the Missouri River Recovery and Mitigation Program to assist Reclamation with design and construction of an Intake Dam project for the purpose of "ecosystem restoration." Pursuant to the Corps' Engineer Regulation 1165-2-501, "ecosystem restoration" means to "partially or fully reestablish the attributes of a naturalistic, functioning, and self-regulating system." The Bypass Channel Alternative does not restore a naturalistic, functioning, or self-regulating system.
- 124. The Corps and Reclamation made their 2015 decision to authorize the Intake Project before obtaining key information and authorizations under other environmental laws such as the CWA and ESA. The Corps issued a "Statement of Findings" on the Project's compliance with section 404 of the Clean Water Act, 33 U.S.C. § 1344, on June 18, 2015, more than two months after authorizing the Intake Project. Although both the Corps and Reclamation are required to begin Section 7 consultations under the ESA at the "earliest possible time," 50 C.F.R. §

402.14(a), to determine whether the Project will "jeopardize" pallid sturgeon, Reclamation failed to complete consultation until July 10, 2015, approximately three months after approving the Project, and the Corps made clear that it did not intend to complete any ESA consultation whatsoever in connection with the 2015 decision.

1. The Corps' and Reclamation's NEPA Process Culminating in the 2015 Decision

125. The Corps and Reclamation's NEPA analyses for the Intake Project have involved, among other things, two "draft" EAs and two "final" EAs. The Corps' and Reclamation's first "final" EA was issued in 2010. The 2010 Final EA adopted a plan to build a long "rock ramp" over the site of the current dam for the benefit of pallid sturgeon. In the 2010 Final EA, the agencies also authorized the construction of headworks and fish screens at the irrigation canal to reduce fish entrainment. By April 2011, the agencies had abandoned the "rock ramp" plan. However, the agencies proceeded with the construction of headworks and fish screens. The headworks and fish screens began operating in 2012. The construction and operation of the headworks and fish screens in 2012 reduced the number of "fish passage" alternatives available to the agencies. After 2012, the agencies limited their consideration of alternatives to those that are compatible with the headworks and fish screens.

- 126. After abandoning the "rock ramp," the Corps and Reclamation turned to their current proposal: the Bypass Channel Alternative. While the agencies made engineering and other modifications to the Bypass Channel Alternative throughout the planning process, the core components remain the same: the construction of a concrete dam spanning the Yellowstone River, the construction of an artificial bypass channel, and the "plug" of the existing natural side channel.
- Supplement to the 2010 Final EA identifying the Bypass Channel Alternative as their preferred alternative, and submitted the Supplement to Batelle Memorial Institute for an Independent External Peer Review. Batelle Memorial Institute completed this Peer Review in February 2013. The Peer Review identified two principal concerns. First, the Peer Review expressed concern that some alternatives to achieve fish passage were "dismissed prematurely and should have been re-examined in the Supplement to the EA." Second, the Independent Peer Review expressed concern about the "significant uncertainties" that the Bypass Channel Alternative will "function successfully," or that an adaptive management strategy will be able to "lead to a successful outcome" if the Bypass Channel Alternative fails.

- 128. Cooperating agencies apparently also voiced concern about the Bypass Channel Alternative. From June through September 2013, the Corps and Reclamation convened meetings with certain stakeholders to re-evaluate potential alternatives. Despite these concerns, upon completion of this process, the Corps and Reclamation again identified the Bypass Channel Alternative as their preferred alternative.
- 129. In March 2014, the Bypass Channel Alternative was publicly identified for the first time as the agencies' preferred alternative in a "Draft Supplemental EA" to the 2010 Final EA.
- 130. In the 2014 Draft Supplemental EA, the Corps and Reclamation claimed to evaluate two "action alternatives:" the rock ramp that it had already abandoned by April 2011 and the Bypass Channel Alternative. In addition, the 2014 Draft Supplemental EA evaluated the "no action" alternative. The Corps and Reclamation recognized that the "no action" alternative would violate the ESA. As a result, the only alternative evaluated in the Final EA that was viable, from the agencies' perspective, was the "Bypass Channel Alternative."
- 131. In response to the 2014 Draft Supplemental EA, Plaintiffs and others expressed concerns and objected to the Bypass Channel Alternative, primarily due to concerns that it would not lead to pallid sturgeon recovery in the upper Missouri

River basin. In addition, Plaintiffs and others urged the agencies to consider alternatives that would open the river to pallid sturgeon and other fish migration and facilitate pallid sturgeon recovery.

- 132. The 2015 Final Supplemental EA did not evaluate any additional alternatives. As in the 2014 Draft Supplemental EA, the agencies considered two "action alternatives"—the abandoned "rock ramp" and the Bypass Channel Alternative—and the "no action" alternative. This constituted an unreasonably narrow, and thus illegal, range of alternatives for purposes of a NEPA analysis.
 - 2. The Agencies' Failure to Evaluate in 2015 Whether the Intake Project Will Facilitate Pallid Sturgeon Recovery
- 133. The primary purpose and need for the Intake Project was for the Corps and Reclamation to meet their conservation, recovery, and consultation obligations under the ESA. As described above, the agencies' current operations of Intake Dam and Fort Peck Dam are violating sections 7 and 9 of the ESA and were violating those provisions at all relevant times discussed in this Complaint. The Intake Project, and proposed in the 2015 EA, was intended to remedy those violations. The core purpose of the ESA, including sections 7 and 9, is to recover threatened and endangered species. To meet this purpose and the ESA's legal requirements, the ultimate litmus test for the Intake Project is whether Reclamation and the Corps can ensure that the Project will not cause jeopardy to the pallid

sturgeon and will facilitate the species' survival and recovery in the upper Missouri Basin.

- whether the Intake Project will facilitate the recovery of the pallid sturgeon. The 2015 Final Supplemental EA failed to evaluate whether pallid sturgeon will be able to re-establish a naturally-reproducing, viable population in the upper Missouri River basin despite the presence of the new concrete dam. Relatedly, the 2015 Final Supplemental EA did not set forth any biological metrics to measure the "success" of Intake Project in relation to pallid sturgeon recovery. In other words, the agencies failed to evaluate whether the Project would comply with the ESA and therefore achieve the purpose and need for the Project.
- 135. For example, the Corps and Reclamation failed in the Final EA and FONSI to analyze how many, or what percentage of, pallid sturgeon were likely to use the bypass channel. The agencies also failed to analyze whether that amount, even under a best-case scenario, would be sufficient to allow the growth of a self-sustaining population. The agencies failed to assess the long-term viability of the population under any scenario. In addition, the agencies concluded, absent analysis or supporting documentation, that larvae spawned upstream of Intake will successfully pass the new concrete dam when they drift downstream. If the larvae

cannot pass the new concrete barrier, pallid sturgeon will not be able to successfully reproduce in the Yellowstone River. Moreover, the agencies failed to adequately analyze whether adults and juveniles would be able to swim downstream to return to the Missouri River, where they typically spend much of the year, or whether they would be trapped upstream of Intake. Relatedly, the agencies failed to analyze whether the new dam would contribute to entrainment of larvae in the diversion channel, as the fish screens were not sized to reduce entrainment of fish smaller than 1.6 inches.

136. Moreover, the agencies chose the Bypass Channel Alternative before completing a formal ESA Section 7 consultation with FWS on July 10, 2015, which should have provided essential information about the effects of the Intake Project on pallid sturgeon survival and recovery to inform the public and the agencies' decision-making process. The Corps made clear during the 2015 decision-making process that it did not intend to complete a formal ESA Section 7 consultation regarding the effects of Intake Project. Reclamation and FWS did not complete formal ESA Section 7 consultation until July 10, 2015, three months after issuing the final decision selecting the Bypass Channel Alternative and long after any opportunity for the public to comment during the NEPA process with the benefit of this information. The agencies' failure to obtain essential information

regarding whether the Intake Project will fulfill the purpose and need for the Project, and whether it will facilitate recovery of the pallid sturgeon, during the NEPA process, rather than after its conclusion, subverted the purpose and requirements of NEPA.

- 137. Instead of evaluating the impacts of the Project on the pallid sturgeon's ability to survive and recover, the agencies limited the analysis in the 2015 Final Supplemental EA to the engineering specifications related to the gradient and flow of water for an artificial channel that may provide "fish passage" of an undetermined level. The agencies' scope of analysis in that EA was arbitrary and unlawfully narrow. To the extent the agencies' intended to limit the purpose and need for the Project to engineering criteria related to "fish passage" only, this purpose and need was itself arbitrary and unlawfully narrow.
- 138. By failing to analyze how the Intake Project would affect the recovery of the pallid sturgeon, the agencies failed to take the required "hard look" at the impacts of the Project. By failing to analyze how the Intake Project would affect the recovery of the pallid sturgeon, the agencies failed to adequately evaluate whether the preferred alternative will fulfill the purpose and need of the Project and failed to adequately evaluate the direct, indirect, and cumulative effects of this action.

3. The Agencies' Failure to Prepare an EIS as Part of the 2015 Decision-making Process

- The direct, indirect, and cumulative effects of the Intake Project on the pallid sturgeon will be "significant" and require the preparation of an EIS. The impacts of the Intake Project may determine the fate of this endangered species. As proposed in the 2015 Final Supplemental EA, the Intake Project would have served as a substitute for Fort Peck Dam operational changes—meaning that the Intake Project alone may have determined whether the pallid sturgeon can become a self-sustaining, viable wild population in the upper Missouri River basin or whether the wild population will be extirpated. In addition, the Corps' failure in 2015 to complete a formal ESA section 7 consultation on the effects of the Intake Project on pallid sturgeon, and both the Corps' and Reclamation's failure to ensure that the Project will not jeopardize that species as part of the 2015 decision-making process, violated the ESA. An agency's potential violation of an environmental statute such as the ESA requires the preparation of an EIS.
- 140. Despite the importance of this Project in determining whether the pallid sturgeon will be extirpated from the upper Missouri River basin, the success of this Project in facilitating pallid sturgeon recovery is, at best, highly uncertain and involves unknown risks. In their 2015 Final Supplemental EA, the agencies cited no analogous, successful project elsewhere that would serve as a precedent to

predict the Intake Project's likely success. Instead, scientists, an independent peer review, and state and federal agency officials repeatedly expressed concern during the 2015 decision-making process that the Project's success was highly uncertain and involved unknown risks to the species. Thus, the 2015 Final Supplemental EA was unlawful because NEPA requires the preparation of an EIS when a project's effects are highly uncertain or involve unknown risks.

141. Moreover, in addition to the impacts on the pallid sturgeon, the Project will also have significant effects on an ecologically critical area. The Lower Yellowstone River is home to 31 native fish species and 21 non-native fish species. The existing rock structure at Intake impedes upstream and downstream migration for many of these species. The Intake Project will exacerbate these impediments through the construction of a more permanent and larger barrier. In addition, natural side channels are critical to many Yellowstone River fish populations. The Corps' decision to fill the natural side channel that now bypasses Intake Dam likely will impact these populations significantly and is another reason that Reclamation and the Corps violated NEPA by preparing the 2015 Final Supplemental EA.

- 4. The Agencies' Rejection of Open River Alternatives in the 2015 Final Supplemental EA
- 142. Consistent with the agencies' failure to take a "hard look" at the impact of the Intake Project on pallid sturgeon recovery in the 2015 Final Supplemental EA, the scope of the alternatives the Corps and Reclamation evaluated in that document was too narrow. The agencies did not consider any alternatives in any of their draft or final EAs on the Intake Project that have a high likelihood of facilitating pallid sturgeon recovery. Specifically, the agencies failed to evaluate any alternatives in their 2015 Final Supplemental EA that would have removed the existing rock structure to provide full river passage for the pallid sturgeon and other fish, and adopt an alternative means of diverting water into the irrigation canal or otherwise providing the requisite water to irrigators.
- 143. Reclamation and the Corps eliminated from detailed study in the 2015 Final Supplemental EA all open river alternatives, and also failed to analyze alternatives suggested by the February 2013 Peer Review. Relatedly, the Corps and Reclamation failed as part of that analysis to evaluate any water conservation or efficiency alternatives, which could have provided more flexibility for an open river alternative. The Corps and Reclamation also failed in the 2015 Final Supplemental EA to evaluate the use of renewable energy sources to supplement power demand for any potential alternatives that would require pumps.

- 144. The agencies' elimination from detailed study of open river alternatives in the 2015 Final Supplemental EA was arbitrary and violated NEPA. The agencies failed to consider a reasonable range of alternatives in any of the draft or final EAs related to the 2015 decision-making process concerning Intake Project.
 - H. Failure to Comply with the ESA Duty to Consult on the Intake Project and Ensure Against "Jeopardy" as Part of the 2015 Decision-making Process
- 145. As described above, the ultimate litmus test for the Intake Project is whether Reclamation and the Corps can ensure that the Project will not cause jeopardy to the pallid sturgeon and will facilitate the species' survival and recovery in the upper Missouri River Basin. The procedural mechanism to ensure that the Project does not cause jeopardy is a formal ESA section 7 consultation. Yet, the Corps explicitly indicated it would not engage in consultation with respect to the 2015 approval of the Bypass Channel Alternative. Reclamation finally completed ESA consultation on July 10, 2015, but as discussed below and in Plaintiffs' Tenth Cause of Action this consultation failed to use the best available science and was otherwise unlawful and arbitrary and capricious. As a result neither agency had satisfied its individual procedural and substantive ESA obligations at the time the

agencies approved the Bypass Channel Alternative in 2015 or at the conclusion of the July 2015 consultation between FWS and Reclamation.

- 146. The Corps and Reclamation have separate duties to complete a formal section 7 consultation and ensure that the Project will not cause jeopardy to the pallid sturgeon. Nonetheless, the Corps refused to complete a formal section 7 consultation regarding the effects of its authorization of the Intake Project as part of the 2015 approval process for the Bypass Channel Alternative. The Corps' refusal to formally consult with FWS as part of the 2015 Intake Project approval process violated the Corps' procedural and substantive ESA section 7 duties in connection with the Intake Project and its Fort Peck Dam operations.
- 147. Two weeks after authorizing the Intake Project, on April 14, 2015, Reclamation initiated formal consultation with FWS on, as relevant here, interim existing operations and maintenance of Intake Dam until the Intake Project is completed, construction of the Intake Project, and future operations and maintenance of the Intake Dam after the Project is completed. Reclamation's failure to complete a formal section 7 consultation prior to its authorization of the Project undermined the purposes of the ESA. This is particularly true here, where the purpose of the Project is to address ongoing ESA violations, including the existing jeopardy to the species caused by the current operation of the Intake and

Fort Peck Dams. Though Reclamation finally completed formal consultation on July 10, 2015, this consultation did not inform the agency's decision to authorize the Project in any way. Moreover, because this consultation failed to comply with ESA standards, failed to use the best available science indicating the Project's ability to restore fish passage was highly uncertain, and failed to fully examine the Project's likelihood of restoring a naturally reproducing population of sturgeon in the upper Missouri River Basin, Reclamation violated its ESA section 7 obligation to ensure its actions do not jeopardize the continued existence of listed species. Indeed, the July 2015 Biological Opinion entirely failed to explain how a species which was already jeopardized by the existing situation as explained above, is somehow not jeopardized by perpetuation of that situation, including the annual replenishment of the existing dam with tons of rock for at least two to three more years.

- I. The Corps' Unlawful Decision to Authorize the Placement of Fill into the Waters of the United States Under CWA Section 404 in the 2015 Statement of Findings
- 148. On March 13, 2015, the Corps noticed the public that it had submitted an application to itself for a review to determine whether the CWA requirements for issuance of a CWA section 404 discharge permit were satisfied with respect to the Intake Project.

- 149. On June 18, 2015, the Corps finalized a Statement of Findings for the Project. This Statement of Findings ("2015 SOF") concluded that the dredge and fill activities for the construction of the Bypass Channel Alternative—which include the placement in the main channel of the Yellowstone of a new concrete dam upstream from the existing rock dam, the addition of fill materials between the new and existing dams, and the plugging of a natural side channel to the Yellowstone—met the requirements for a CWA section 404 discharge permit.
- 150. The 2015 SOF relied on the unlawful 2015 Final Supplemental EA to conclude that the Bypass Channel Alternative satisfied the requirements of the 404(b)(1) Guidelines. The Corps' reliance on that NEPA documentation to conclude that the substantive requirements of the 404(b)(1) regulations were satisfied was arbitrary and capricious.
 - 1. The Corps' Failure in the 2015 SOF to Support its Conclusion that the Project Will Not Cause Jeopardy to the Pallid Sturgeon
- 151. The Corps' conclusion in the 2015 SOF that the substantive requirement of 40 C.F.R. § 230.10(b)(3) mandating that "[n]o discharge of dredged or fill material shall be permitted if it . . . [j]eopardizes the continued existence of species listed as endangered or threatened" under the ESA was met was arbitrary. See SOF 24. The Corps did not initiate or complete, as part of the 2015 decision-

making process, an ESA section 7 consultation to determine whether the Intake Project would jeopardize the pallid sturgeon. As a result, neither the Corps nor FWS completed the required analysis or evaluated the full scope of the impacts of the Bypass Channel Alternative on the pallid sturgeon as part of the 2015 decision-making process.

To determine whether the Project will cause "jeopardy" to the pallid sturgeon, the Corps must evaluate the impact on the pallid sturgeon's ability to survive and recover. This analysis must include, among other things, whether the number of pallid sturgeon that are likely to use the bypass channel will be sufficient to re-establish a self-sustaining, viable wild population. This analysis must also include the impact of the dam structure on the ability of adult and juvenile pallid sturgeon to return downstream and whether any larvae spawned upstream will be able to successfully drift downstream, despite the presence of the new Dam. This analysis must also include a determination and supporting evidence for eliminating the required "reasonable and prudent alternative" of flow enhancements at Fort Peck Dam. However, the 2015 SOF did not analyze these or other impacts of the Intake Project on the survival or recovery of the pallid sturgeon.

- 153. Further, the Corps repeatedly admitted that the ability of the artificial bypass channel to pass any pallid sturgeon is highly uncertain. As noted above, fisheries biologists, an independent peer review, and state and federal agency officials also repeatedly expressed concern that the Project's success is highly uncertain and involves unknown risks to the species.
- 154. Nonetheless, the Corps failed in its 2015 SOF to analyze and support its conclusion that the Bypass Channel Alternative would not cause jeopardy to the pallid sturgeon. Moreover, the Corps' conclusion was contradicted by the available evidence. Under EPA's 404(b)(1) Guidelines, the Corps was required to deny authorization for the Project. 40 C.F.R §§ 230.10(b)(3), 230.12(a)(3)(ii), (iv). The SOF's conclusion that the Bypass Channel Alternative would not cause jeopardy to the pallid sturgeon was arbitrary and capricious and contrary to law.
 - 2. The Corps' Failure in the 2015 SOF to Assess and Adopt Less Environmentally Damaging Practicable Alternatives that Fulfill the Purpose of the Project
- 155. As described above, the underlying purpose and need for the Intake Project is to remedy the Corps' and Reclamation's ongoing ESA violations at Fort Peck Dam and Intake Dam, respectively.

- 156. The 2015 SOF concluded that the Bypass Channel Alternative is the "least environmentally damaging practicable alternative." SOF at 13, 24; see 40 C.F.R. § 230.10(a).
- 157. The alternatives analysis in the 2015 SOF relied on the alternatives analyses in the Draft and Final Supplemental EAs to determine the Bypass Channel Alternative is the "least environmentally damaging practicable alternative." However, neither the 2010 nor the 2015 EA considered an action alternative that provided for removing the Dam and opening the river. As described above, an "open river" alternative is the least environmentally damaging practicable alternative and has the greatest opportunity for meeting the stated purpose and need for the Project. The EAs arbitrarily eliminated all "open river" alternatives from detailed study. Relying primarily on those EAs, the 2015 SOF also eliminated "open river" alternatives from detailed study based on unsupported conclusions regarding the costs of these alternatives. In addition, the Corps failed to adequately evaluate methods to reduce the costs of an "open river" alternative, including, but not limited to, renewable energy and conservation measures. Thus, the 2015 SOF provided no basis to complete a reasoned evaluation of the impracticability of any "open river" alternative.

- Alternative would fulfill the Project's purpose was also unsupported. The underlying purpose of the Project is to bring Reclamation's Intake Dam operations into compliance with the ESA and to bring the Corps' Fort Peck Dam operations into compliance with the ESA. The Corps did not evaluate in the 2015 SOF whether the Bypass Channel Alternative would achieve those objectives. In fact, the available evidence demonstrated that the Bypass Channel Alternative likely would fail to achieve the underlying purpose and need for the Project.
- 159. In addition, the Corps did not fully evaluate in the 2015 SOF the costs associated with the Bypass Channel Alternative. For example, the quantified assessment of costs entirely failed to evaluate the costs of remedial measures that it acknowledged will likely be required. These remedial measures would likely be required because, even under the Corps' assessment in the 2015 SOF, the effectiveness of the artificial channel as a passage for pallid sturgeon is highly uncertain. The Corps averred that, "[i]f no passage is documented, Reclamation will investigate and implement measures to adaptively manage the deficiency." SOF at 19, 20, 21. The Corps did not identify any measures that may be implemented, and did not assess the cost of measures to remedy any failures of the Project. See id.

- 160. In the 2015 SOF, the Corps failed to adequately analyze and support its conclusion that there are no less environmentally damaging practicable alternatives to achieve the Project's purpose. Moreover, the Corps' conclusion that the Bypass Channel Alternative is the least environmentally damaging practicable alternative was contradicted by the available evidence. Under EPA's 404(b)(1) Guidelines, the Corps was required to deny authorization for the Project. 40 C.F.R §§ 230.10(a), 230.12(a)(3)(i), (iv). The SOF's conclusion that the Bypass Channel Alternative was the least environmentally damaging practicable alternative was arbitrary and capricious and contrary to law.
 - 3. The Corps' Failure in its 2015 SOF to Support its Conclusion that the Project Would Not Cause Significant Degradation to the Yellowstone River
- 161. The Corps may not permit a dredge and fill activity that "cause[s] or contribute[s] to significant degradation of the waters of the United States," which includes the Yellowstone River. 40 C.F.R. § 230.10(c). Effects that contribute to significant degradation include: "[s]ignificant adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include ... loss of fish and wildlife habitat." 40 C.F.R. § 230.10(c)(3).
- 162. First, for the reasons explained above, the Corps failed to adequately evaluate the impact of the Project on the habitat of the endangered pallid sturgeon,

and therefore necessarily has failed to evaluate the potential "loss of fish and wildlife habitat." 40 C.F.R. § 230.10(c)(3).

- value resulting from discharges that kill individuals of threatened and endangered species or interfere with their use of habitat for vital functions. 40 C.F.R. § 230.30(b). For the same reasons that the Corps' 2015 SOF and authorization violated the requirement that no discharge can be authorized that would jeopardize an endangered or threatened species, the Corps' analysis of impacts in the 2015 SOF was unsupported, arbitrary and capricious, and contrary to law.
- 164. Second, neither the 2015 SOF nor the EAs it relied upon evaluate the significant degradation that the Project will cause to the entire aquatic ecosystem of the Yellowstone. The Yellowstone River is often referred to as the longest undammed river in the contiguous United States and its floodplain is largely intact. The lower Yellowstone River has been identified by the Environmental Protection Agency as an aquatic resource of national importance.
- 165. As explained in the 2015 Final Supplemental EA, the Project would have entailed extensive loss of floodplain function. The Project would have filled a 23,400 foot long functional side channel habitat, and excavate an extensive (11,500 foot—more than two mile) section of existing riparian cottonwood gallery

forest. The Project would have permanently impacted 147 acres of channel migration zone and temporarily impact 425 acres in the channel migration zone. Not only would this Project have impacted important habitat, it could have activated preexisting channels and contribute to additional erosion of soil and sediment into the Yellowstone River.

166. In its 2015 SOF, the Corps failed to adequately analyze and support its conclusion that the Bypass Channel Alternative would not cause significant degradation to the Yellowstone River. Moreover, the Corps' conclusion in the 2015 SOF that the Bypass Channel Alternative would not cause significant degradation to the Yellowstone River was contradicted by the available evidence when the Corps issued its 2015 SOF. Under EPA's 404(b)(1) Guidelines, the Corps was required to deny authorization for the Project. 40 C.F.R §§ 230.10(c), 230.12(a)(3)(ii), (iv). The 2015 SOF's conclusion that the Bypass Channel Alternative would not cause significant degradation to the Yellowstone River was arbitrary and capricious and contrary to law.

4. The Corps' Failure in its 2015 SOF to Support Its Conclusion Regarding the Public Interest Test

167. The Corps' regulations require it to conduct a balancing test to evaluate whether authorization of a discharge is in the public interest. 33 C.F.R. § 320.4(a)(1). That test requires a balancing of the reasonably foreseeable benefits

and detriments of the proposed activity with respect to factors including fish and wildlife values. <u>Id</u>. The test requires the Corps to consider, where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work. 33 C.F.R. § 320.4(a)(2)(ii).

- 168. The 2015 SOF concluded that the Bypass Channel Alternative did not involve any significant negative impact to the public interest factors. SOF at 26. This conclusion relied on a faulty EA that failed to assess the full scope of the Bypass Channel Alternative's impacts on the pallid sturgeon's survival and recovery, as explained above. The assessment of benefits and detriments to wildlife values was therefore unsupported and arbitrary and capricious.
- 169. The 2015 SOF concluded that there are no available reasonable alternatives to the Bypass Channel Alternative that would achieve the Project's purpose. SOF at 26. This conclusion relied on a faulty analysis of alternatives that eliminated "open river" alternatives without establishing the impracticability of those alternatives, for the reasons described above.
- 170. The 2015 SOF violated 33 C.F.R. § 320.4(a) and was arbitrary and capricious.

I. FWS's July 10, 2015 Biological Opinion

- 171. On July 10, 2015, Reclamation and FWS completed formal ESA Section 7 consultation and FWS released its biological opinion on the interim operations and maintenance of the Intake Dam pending the completion of the proposed Intake Project, the construction of the Intake Project, including the proposed new Dam and artificial bypass channel, and the future operation and maintenance of the new Dam and artificial bypass channel. FWS concluded in its July 10, 2015 Biological Opinion ("2015 Biological Opinion") that none of these agency actions jeopardize the continued existence of the pallid sturgeon. This conclusion violated the ESA and was arbitrary.
- 172. FWS's 2015 Biological Opinion failed to ensure these agency actions will not jeopardize the continued existence of the pallid sturgeon, failed to use the best available science in reaching its conclusions, used an inappropriate standard to reach its no jeopardy conclusion, and was otherwise unlawful, arbitrary and capricious in violation of ESA Section 7(a)(2), 16 U.S.C. § 1536(a)(2), and the APA in at least the following respects.
- 173. With respect to the interim operation of the current Intake Dam, FWS's 2015 Biological Opinion acknowledged that "restoring habitat connectivity where barriers to fish movement occur" is a priority level 1 action in the pallid

sturgeon recovery plan. Priority 1 actions are considered "actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future." In short, restoring pallid sturgeon passage around the Intake Dam is the type of activity necessary if this species is to avoid extinction. Indeed, FWS's consistent position as discussed above is that allowing pallid sturgeon passage at the Intake Dam is necessary to remove the existing jeopardy to the species caused by the Corps' operation of the Fort Peck Dam.

- 174. It follows that as currently operated and maintained, the existing Intake Dam jeopardizes the pallid sturgeon by reducing its likelihood of survival and recovery in the wild by "reducing the reproduction, numbers, or distribution" of the species. 50 C.F.R. § 402.02 (defining jeopardy). The current operation and maintenance of Intake Dam, which requires the addition of tons of rock to the Dam each year to offset natural erosion, prevents nearly all pallid sturgeon migration above the Dam and thus makes successful reproduction impossible.
- 175. In its 2015 Biological Opinion, FWS recognized that as long as the current Dam is consistently re-built "any spawning adult sturgeon that attempts to pass the dam will be thwarted." However, FWS then immediately discounted this acknowledgement by saying this will only be the situation for 2-3 more years, while the Intake Project would be constructed, and is similar to the situation that

has existed for decades. While it is true that this situation has existed for decades as the agencies illegally delayed meeting their ESA obligations, and continued to add new rock to the Dam nearly every year, what FWS failed to recognize and, incongruously discounted in reaching its "no jeopardy" conclusion, is that maintaining and re-building a dam that already creates a jeopardy situation for two to three more years is still jeopardy. While FWS may have believed that it saw light at the end of the tunnel, at the time it prepared the 2015 Biological Opinion FWS knew that the situation on the ground for at least several years after the issuance of the biological opinion would be exactly the same as it was before the Intake Project was approved. The current existence and operation of the Intake Dam, and the agency's decisions to periodically re-build the Dam, jeopardizes the continued existence of the pallid sturgeon. FWS's conclusion to the contrary in the 2015 Biological Opinion violated the ESA and was arbitrary.

176. FWS's determination in the 2015 Biological Opinion that the next two to three years are unimportant was also contradicted by the agency's own prior projections that extirpation of this species will occur in the near future. FWS's conclusion in the 2015 Biological Opinion that continuing existing Intake Dam operations for two to three more years did not jeopardize the continued existence of the species contradicted FWS's own prior position and was arbitrary.

177. As to FWS's conclusion in the 2015 Biological Opinion that construction and operation of the Intake Project would not jeopardize the pallid sturgeon, that conclusion was arbitrary and unlawful because it was far from certain that the bypass channel would actually succeed. FWS's conclusion rested on a number of wildly optimistic assumptions that ignored the best available science. For example, FWS assumed in the 2015 Biological Opinion that *all* adult pallid sturgeon (estimated to be 32 individuals) that migrate up to the Intake Dam would use the artificial bypass channel to migrate past the Dam. FWS based this conclusion on its "experience with fish bypass channels and the design of this bypass." However, the biological opinion was devoid of a single example of a successful fish bypass channel. The 2015 Biological Opinion also ignored the best available scientific information indicating that the potential for success of the bypass channel was highly uncertain. Even the 2015 Biological Assessment prepared by Reclamation, and to which the 2015 Biological Opinion responds, indicates "it may ... be difficult for some pallid sturgeon to locate the entrance of the proposed bypass channel" and predicts at least some level of harm. FWS's position in the 2015 Biological Opinion that all sturgeon that reach the Dam would find and use the bypass channel was simply not supported by scientific evidence and was speculative.

- example, FWS concluded that most free embryos spawned above the new Dam and all returning adult fish would be able to successfully avoid entrainment in the fish screens and pass over the structure when returning downstream. Yet in the biological assessment Reclamation indicated there was "potential harm as free embryos, larvae, juvenile, and adult pallid sturgeon migrate downstream over the proposed weir and boulder field." Without the benefit of any additional scientific evidence, FWS's 2015 Biological Opinion transformed these significant issues of scientific uncertainty that existed in March 2015, when the biological assessment was written, into perfect certainty to support its no jeopardy conclusion in the 2015 Biological Opinion. FWS's effort to sweep the scientific uncertainty under the rug failed to use the best available science and was arbitrary.
- 179. Additionally, even when FWS acknowledged in the 2015 Biological Opinion that there was scientific uncertainty, the agency relied on conclusory assertions and speculation to determine that the impacts to pallid sturgeon would be sufficiently minor to support its no jeopardy conclusion. For example, FWS acknowledged that it does not know how many free embryos and larvae will die through entrainment in the irrigation canal, impingement on the fish screens, or through injuries caused by the new Dam and rock debris field that will be

downstream of the new Dam. Nonetheless, FWS concluded that these deaths will be "small" in proportion to the overall number of free embryos and larvae and will not jeopardize the continued existence of the species. FWS cited no scientific evidence for this conclusion. In an effort to provide at least some speculative support for its conclusion, FWS relied on the shovelnose sturgeon as a "surrogate" to suggest that pallid sturgeon will not be unduly affected by the Intake Project. However, the shovelnose sturgeon population is currently stable, and relatively abundant, even under the current conditions resulting from the operations of the Intake Dam—conditions which have dramatically harmed the pallid sturgeon. The population of this more abundant, and apparently more resilient species, did not provide any evidence about whether the apparently more sensitive pallid sturgeon would be able to re-establish a stable population once the Intake Project is built. This conclusion, like others throughout the 2015 Biological Opinion, could not be reconciled with the facts found in the biological opinion or the best available science and failed to meet ESA standards for ensuring that the proposed action would not cause jeopardy.

180. FWS also provided an Incidental Take Statement (ITS) in the 2015 Biological Opinion. The ITS acknowledged that 32 adult sturgeon will be taken under existing operation and maintenance of Intake Dam prior to the construction

of the Intake Project because they will not be able to pass the Dam to reproduce upstream. The ITS did not provide for any take of adult pallid sturgeon after the construction of the Intake Project. FWS's conclusion in the 2015 Biological Opinion that all 32 adult sturgeon anticipated to be present in the River at the Dam location would be able to locate the artificial bypass channel and pass through it successfully to reproduce upstream was unrealistically optimistic and contrary to prior statements and conclusions by other agencies and scientific experts. It was unsupported by the best available science and arbitrary.

181. The 2015 ITS also acknowledged that free embryos and larvae will be taken by the Intake Project through entrainment in the irrigation canal, impingement on the fish screens, and/or death and injury going over the new Dam or through the rock debris field downstream of the Dam. FWS stated that it is unable to measure the extent of this take. Accordingly, FWS used a "surrogate"—shovelnose sturgeon—to attempt to measure the rate of acceptable take of free embryos and larvae. FWS's conclusions in the 2015 Biological Opinion about the anticipated take of pallid sturgeon free embryos and larvae were unsupported by the best available science and did not meet ESA standards. FWS failed to support its conclusion in the 2015 Biological Opinion that the shovelnose sturgeon is an appropriate surrogate to measure the effects of the Project on pallid sturgeon or to

measure the take of the pallid sturgeon. Further, FWS and Reclamation did not determine in the 2015 Biological Opinion or elsewhere as part of the 2015 decision-making process what methodology they will use to measure this take and/or whether that methodology was likely to accurately measure this take. In addition, FWS did not even state whether or how the take of larval sturgeon could be exceeded and under what, if any, terms the reinitiation of consultation could be required.

- 182. For at least these reasons, FWS's 2015 Incidental Take Statement violated the ESA, 16 U.S.C. §§ 1536(b)(4), failed to use the best available science in reaching its conclusions, and was arbitrary and capricious in violation of the ESA and the APA.
 - J. This Court's September 2015 Ruling Enjoining Federal Defendants' Actions Pending Further Environmental Review
- 183. In February 2015, Plaintiffs filed this lawsuit challenging various actions undertaken by Federal Defendants with respect to Fork Peck Dam and Intake Dam. See Doc. 1. In 2015, Plaintiffs three times amended and supplemented their Complaint to include current facts, information, and legal claims based on those facts. See Docs. 18, 36, 52. On this basis, and in order to prevent irreparable harm to the pallid sturgeon and to Plaintiffs' and their members' interests in this species and its habitat, Plaintiffs filed two preliminary

injunction motions seeking injunctive relief against the Intake Project on the basis of certain NEPA and ESA violations alleged in Plaintiffs' Complaint. <u>See</u> Docs. 27, 28 (NEPA); 53, 54 (ESA).

- 184. On September 4, 2015, this Court granted both of Plaintiffs' preliminary injunction motions and enjoined the agencies from "further implementing the Project until dissolution of the preliminary injunction." See Doc. 73 at 20 (citing Docs. 27, 53). In particular, the Court held that Plaintiffs had "demonstrated substantial questions going to the merits" of whether the NEPA analysis was inadequate. Doc. 73 at 19. In addition to requiring the agencies to prepare an EIS (rather than an EA and FONSI) to analyze in detail key questions concerning the Project's impacts on the pallid sturgeon, the Court identified several crucial deficiencies that it ordered the agencies to examine in its EIS that had been overlooked in the 2015 EA and FONSI:
 - The agencies' failure to analyze "whether the pallid sturgeon actually would be likely to use the bypass channel." Doc. 73 at 8.
 - The agencies' failure to "consider whether similar bypass channels have been successful in the past." Id.
 - The agencies' failure to analyze "whether the bypass channel likely would allow a sufficient number of pallid sturgeons to spawn so that the species could recover, or whether a new weir will prevent pallid sturgeon from recovering." Id.

- The agencies' "uncertainty regarding possible effects on the viability of pallid sturgeon larvae." Id. at 12.
- analysis of the Project's effects on pallid sturgeon recovery made it impossible to determine whether the Project complied with the ESA. See Doc. 73 at 11 ("This Court cannot, in turn, determine . . . whether the Project would violate the ESA unless the Court possesses more information about the anticipated success of the proposed bypass channel."). The Court specifically mandated that "[t]he new analysis should include the anticipated effects of the Project on the recovery of the pallid sturgeon." Id. at 11-12.
- 186. In enjoining the Project pending further review and analysis, the Court concluded that "that prudent approach requires a careful consideration of the environmental impact before proceeding with the Project. Doc. 73 at 17-18. The Court found that requiring the agencies to complete the legally required analysis "will ensure that Federal Defendants understand the impacts on pallid sturgeon and can address these impacts appropriately." <u>Id.</u> In reaching this conclusion, the Court "recognize[d] that Federal Defendants' continued operation of the existing weir constitutes the reasons the pallid sturgeon cannot swim upriver," <u>id.</u> at 16, thus reinforcing the need for comprehensive and careful environmental analysis before the agencies move forward with implementing an approach that the

agencies must ensure will avert the precarious situation in which the agencies have placed the pallid sturgeon through decades of unlawful dam operation activities.

- K. The 2016 Final Environmental Impact Statement, Record of Decision, Biological Opinion, and Clean Water Act Analysis
- 187. Following the Court's injunction order, the parties stipulated to a stay of the litigation while the agencies completed an EIS and new reviews pursuant to the CWA and ESA. See Doc. 84.
- 188. After publishing a Draft EIS for public review on June 3, 2016, the Corps and Reclamation published the Final EIS on October 21, 2016. The Final EIS evaluated six alternatives, including two dam removal alternatives. See Doc. 104-1 at xlv xlix (Final EIS).
- 189. On December 2, 2016, the Corps and Reclamation issued a Record of Decision ("ROD") again adopting the same Bypass Channel Alternative that the agencies had authorized in 2015. The ROD was accompanied by FWS's November 18, 2016 Biological Opinion concluding formal consultation with Reclamation and the Corps and the Corps' CWA findings.
- 190. Despite the agencies' preparation of an EIS, a new biological opinion, and new CWA findings, nothing in these documents analyzes—or even purports to analyze—the impacts of the Project on pallid sturgeon recovery as required by law and by the Court's September 2015 injunction order. Instead, the agencies asserted

in the EIS that "such an analysis would be entirely speculative" due to a lack of data about pallid sturgeon. Doc. 104-1 at xxxviii (Final EIS). Nothing in the Final EIS or ROD provides an analysis that even attempts to answer the most fundamental question framed by this Court's injunction order concerning the bypass channel—whether pallid sturgeon will actually use it. Rather, the EIS states that "[t]he agencies recognize the uncertainties" inherent in the proposed bypass channel but rely on a monitoring and adaptive management plan to monitor the channel's success after it is built. Id. at li.

opinion, and CWA findings—as was the case with the 2015 EA, FONSI, biological opinion, and CWA findings—do not provide the legally required and court-ordered analysis on critical aspects concerning the Project's impact on pallid sturgeon recruitment and the species' survival and recovery prospects, including whether pallid sturgeon will actually use the proposed artificial bypass channel (and in sufficient numbers to achieve population-level benefits to the species), Federal Defendants remain in violation of NEPA, the ESA, and the CWA for many of the same reasons set forth in Plaintiffs' prior Complaints. Indeed, if anything, these new decision documents and the comments submitted during the decision-making process by independent scientists and other stakeholders underscore the

need for further analysis on key aspects of the Project and its impacts on the pallid sturgeon, and thus reinforce the ongoing unlawful nature of the agencies' activities in operating Fort Peck Dam and Intake Dam.

- 192. For example, in the EIS the agencies have conceded that there is no successful precedent for the completely untested bypass channel that the agencies have proposed. In addition, although the agencies assumed in the EIS that at least 85% of pallid sturgeon that reach Intake Dam would pass through the bypass channel, several independent scientists—including a peer review panel of fish experts commissioned by the Corps—repeatedly raised concerns with that assumption from a scientific standpoint and concluded that there is no evidence to support the agencies' assumption of fish passage success. The peer review panel determined that there is a "substantial risk" that the bypass channel will fail to "facilitate a measurable, population-level response" and thus fail to avert the ongoing jeopardy the agencies are causing to the pallid sturgeon.
- 193. In order to address the lack of evidence to support the agencies' key assumptions in the EIS, the peer review panel "suggest[ed] that an alternative analysis be conducted that assesses the potential for upstream passage exclusively for pallid sturgeon for each stated alternative"—i.e., the same analysis required by the Court's injunction order. Rather than conducting this analysis, the agencies

reiterated their reliance on the design criteria for the bypass channel (e.g., flow, velocity, and depth of channel), which this Court has already rejected as insufficient to satisfy the agencies' legal obligations. See Doc. 73 at 8. In sum, the EIS and ROD do not supply the legally required and court-ordered analysis that is necessary under NEPA to answer crucial questions about this Project's impacts on the pallid sturgeon and its ultimate survival and recovery, nor have the agencies provided any scientific support for their baseless assumption that pallid sturgeon will use this untested artificial bypass channel, let alone in numbers significant enough to avert the ongoing jeopardy to the species and ensure the recovery of this population.

194. In addition to the failure to remedy the deficiencies identified in the Court's September 2015 injunction order concerning the impacts of the Intake Project on pallid sturgeon recovery, the Final EIS violates NEPA in several additional respects. For example, the Final EIS fails to take a "hard look" at the impacts of the Intake Project on pallid sturgeon and whether the Intake Project is likely to achieve the Project's underlying purpose; the Final EIS adopts an unlawfully narrow purpose and need for the Intake Project that is inconsistent with the agencies' NEPA obligations and contrary to the substantive duties imposed on the agencies under the circumstances by the ESA; the Final EIS arbitrarily

considers a no-action alternative that would continue an admittedly illegal practice and thus is not a viable alternative; the Final EIS utilizes an improper baseline that assumes that ongoing jeopardy will continue if the Intake Project is not implemented; the Final EIS arbitrarily fails to evaluate, or even acknowledge, as part of the baseline or as a cumulative effect that the Missouri River is not going to be restored; the Final EIS relies on uncertainties and speculation in reaching its conclusions rather than obtaining crucial information to inform the decisionmaking process for the agencies and the public; the Final EIS arbitrarily relied on the Fish Passage Connectivity Index to support its cost-effectiveness analysis; the Final EIS fails to adequately analyze, let alone disclose, the impacts of the Intake Project on larval mortality; the Final EIS's cost analysis is unsupported by available information and arbitrary; and the Final EIS has adopted adaptive mitigation measures that are unfunded, uncertain, and thus arbitrary under NEPA. For at least these reasons, the 2016 EIS both violates NEPA and is arbitrary and capricious.

1. The 2016 Formal ESA Consultation and FWS's November 18, 2016 Biological Opinion

195. On November 18, 2016, FWS completed formal consultation under section 7(a)(2) of the ESA with Reclamation and the Corps by issuing a biological opinion that mirrors the July 10, 2015 Biological Opinion in many important

respects described in the paragraphs above. As with the 2015 Biological Opinion, the 2016 Biological Opinion focuses on the interim operations and maintenance of the Intake Dam pending the completion of the proposed Intake Project, the construction of the Intake Project, including the proposed new Dam and artificial bypass channel, and the future operation and maintenance of the new Dam and artificial bypass channel. FWS concluded that none of these agency actions will jeopardize the continued existence of the pallid sturgeon. This conclusion does not withstand analysis and violates the ESA in myriad ways.

- 196. FWS's November 18, 2016 Biological Opinion fails to ensure these agency actions will not jeopardize the continued existence of the pallid sturgeon, fails to use the best available science in reaching its conclusions, fails to make a rational connection between the facts before FWS and the no jeopardy conclusion, applied the wrong legal standards to reach its no jeopardy conclusion, and is otherwise unlawful, arbitrary and capricious in violation of ESA Section 7(a)(2), 16 U.S.C. § 1536(a)(2), and the APA in at least the following respects.
- 197. The Intake Dam as currently operated and maintained jeopardizes the pallid sturgeon by reducing its likelihood of survival and recovery in the wild by "reducing the reproduction, numbers, or distribution" of the species. 50 C.F.R. § 402.02 (defining jeopardy). The current operation and maintenance of Intake

Dam, which requires the addition of tons of rock to the Dam each year to offset natural erosion, prevents nearly all pallid sturgeon migration above the Dam and thus makes successful reproduction impossible.

- 198. The 2016 Biological Opinion and its no jeopardy conclusion also violate the ESA and are arbitrary and capricious in part because FWS failed to analyze the impacts of the ongoing operations of Intake Dam or the operation of the Project on pallid sturgeon survival and recovery, as required by the ESA and its implementing regulations. For example, FWS failed to evaluate or disclose the point at which survival and recovery of the species in the wild will no longer be possible, nor whether ongoing operations or the Project will cause the species to reach that point or at least contribute to its demise.
- violate the ESA and are arbitrary and capricious because the analysis of the Project's effects as compared to the environmental baseline is fatally flawed. In determining that the Intake Project will not jeopardize the pallid sturgeon, the 2016 Biological Opinion erroneously limits the "effects" of the action to the narrow impacts of only the Intake Project while including prior and ongoing federal actions that led to the species' current status (none of which have previously completed formal consultation) in the "environmental baseline" against which the

"effects" of the action are measured. By comparing the "effects" of this action to an inappropriate environmental baseline that includes decades of unlawful actions by the Corps and Reclamation that led to the species' precarious situation, FWS has arbitrarily skewed the jeopardy analysis by determining that the Intake Project is not any worse than the baseline.

200. Moreover, FWS's conclusion that the bypass channel is likely to succeed—and thus that jeopardy will be averted—rests on an arbitrary and unlawful definition of success that is limited to upstream fish passage. Even if the agency's definition of success was appropriate, the conclusion that it will be reached is based on a number of wildly optimistic assumptions that are unsupported and ignore the best available science. For example, FWS assumed in the 2016 Biological Opinion that, at best, "up to 59% of the fish detected at the weir may not pass upstream through the new bypass channel"—meaning that under the best case scenario (which is highly unlikely under these circumstances) only 41% of fish reaching the weir would use the bypass channel. Although independent scientists disagree that even 41% of fish are likely to use this bypass channel, in any event FWS based its conclusion on its vague "experience with the movement of pallid sturgeon." However, despite this assumption that some fish

will actually use this channel, the Biological Opinion is devoid of a single example of a successful fish bypass channel.

201. Additionally, even when FWS acknowledged there is scientific uncertainty, the agency relies on conclusory assertions and speculation to determine that the impacts to pallid sturgeon will be sufficiently minor to support its no jeopardy conclusion. For example, FWS acknowledges that it does not know how many free embryos and larvae will die through entrainment in the irrigation canal, impingement on the fish screens, or through injuries caused by the new Dam and rock debris field that will be downstream of the new Dam. Nonetheless, FWS concludes that these deaths will be "small" in proportion to the overall number of free embryos and larvae and will not jeopardize the continued existence of the species. FWS cites no scientific evidence for this conclusion. In an effort to provide at least some speculative support for its conclusion, FWS relies on the shovelnose sturgeon as a "surrogate" to suggest that pallid sturgeon will not be unduly affected by the Intake Project. However, the shovelnose sturgeon population is currently stable, and relatively abundant, even under the current conditions resulting from the operations of the Intake Dam—conditions which have dramatically harmed the pallid sturgeon. The population of this more abundant, and apparently more resilient species, provides no evidence about

whether the apparently more sensitive pallid sturgeon will be able to re-establish a stable population once the Intake Project is built. This conclusion and the incidental take statement ("ITS") that relies upon it, like other conclusions throughout the biological opinion, cannot be reconciled with the facts found in the biological opinion or the best available science and fails to meet ESA standards for ensuring that the proposed action will not cause jeopardy.

The ITS also acknowledges that free embryos and larvae will be taken by the Intake Project through entrainment in the irrigation canal, impingement on the fish screens, and/or death and injury going over the new Dam or through the rock debris field downstream of the Dam. FWS states that it is unable to measure the extent of this take. Accordingly, FWS uses a "surrogate"—shovelnose sturgeon—to attempt to measure the rate of acceptable take of free embryos and larvae. FWS's conclusions about the anticipated take of pallid sturgeon free embryos and larvae are unsupported by the best available science and do not meet ESA standards. FWS failed to support its conclusion that the shovelnose sturgeon is an appropriate surrogate to measure the effects of the Project on pallid sturgeon or to measure the take of the pallid sturgeon. Further, FWS and Reclamation have not yet determined what methodology they will use to measure this take and/or whether that methodology is likely to accurately measure this take. In addition,

FWS does not even state whether or how the take of larval sturgeon could be exceeded and under what, if any, terms the reinitiation of consultation could be required.

203. For at least these reasons, FWS's Incidental Take Statement violates the ESA, 16 U.S.C. §§ 1536(b)(4), failed to use the best available science in reaching its conclusions, and is arbitrary and capricious in violation of the ESA and the APA.

2. The Corps' 2016 Clean Water Act Analysis

- 204. Similar to the Corps' 2015 Statement of Findings, the Corps issued a legally deficient 2016 analysis pursuant to section 404(b)(1) of the CWA, which is arbitrary and capricious, and violates the CWA, in at least the following ways.
- 205. As an initial matter, the CWA Analysis primarily relies on the agencies' EIS to support the selection of the Bypass Channel Alternative, and that analysis is inadequate for the reasons stated above. The Corps' supplementation of this analysis with respect to the factors relevant to the 404 Guidelines is limited only to the Bypass Channel Alternative and the No Action Alternative. Because the NEPA analysis fails to consider the alternatives "in sufficient detail to respond to the requirements of the [404 Guidelines]," the Corps' reliance on the EIS is arbitrary and capricious.

- 206. In addition, the Corps' CWA Analysis, like the EIS, unlawfully narrows the purpose of the Project. The underlying purpose of the Project is to bring Reclamation's Intake Dam operations into compliance with the ESA and to bring the Corps' Fort Peck Dam operations into compliance with the ESA. The Corps did not evaluate whether the Bypass Channel Alternative will achieve those objectives. In fact, the available evidence demonstrates that the Bypass Channel Alternative likely will fail to achieve the underlying purpose and need for the Project. Further, to the extent the Corps' statement of the purpose and need is appropriate, the Corps' conclusion that the Bypass Channel Alternative will fulfill the Project's purpose is also unsupported because it relies on the same inadequate analysis found in the EIS.
- 207. The Corps' analysis of the "least environmentally damaging practicable alternative" is also fatally flawed. For example, the Corps arbitrarily relied on the "Fish Passage Connectivity Index" ("FPCI") to support a cost-effectiveness conclusion that, in the Corps' estimation, justified eliminating the "Multiple Pumps" Alternative from consideration as a practicable alternative. This reliance is misplaced for numerous reasons. With respect to relative environmental impacts—the key issue for determining whether an alternative is the "least damaging"—the FPCI does not represent a rational, scientific basis to differentiate

between the environmental impacts of each alternative. Even if the FPCI model was an appropriate basis to draw this conclusion, as applied here, the inputs to the FPCI model were arbitrary and contrary to the best available science. Further, in primarily relying on the FPCI, the Corps ignored the uncontroverted evidence that the "Multiple Pumps" Alternative is the least damaging alternative. Moreover, the Corps' cost-effectiveness conclusions based on the FPCI model are arbitrary and unsupported. In addition, even if the FPCI model was a valid basis on which to measure cost-effectiveness (which it is not), the Corps applied the wrong legal standard for determining the "least environmentally damaging practicable alternative." The Corps unlawfully failed to determine which alternative was least environmentally damaging based on environmental impacts alone. The Corps also failed to support its conclusion that the "Multiple Pumps" Alternative is not practicable. For at least these reasons, the Corps acted arbitrarily and capriciously, and under EPA's 404(b)(1) Guidelines, the Corps must deny authorization for the Project. 40 C.F.R §§ 230.10(a), 230.12(a)(3)(i), (iv).

208. The Corps may not permit a dredge and fill activity that "[j]eopardizes the continued existence of species listed as endangered" under the ESA. 40 C.F.R \$ 230.10(b)(3). Because the Corps' and Reclamations' ongoing actions are

jeopardizing the species, the Corps' CWA authorization contrary to law, arbitrary, and capricious.

- 209. The Corps may not permit a dredge and fill activity that "cause[s] or contribute[s] to significant degradation of the waters of the United States," which includes the Yellowstone River. 40 C.F.R. § 230.10(c). Effects that contribute to significant degradation include: "[s]ignificant adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include ... loss of fish and wildlife habitat." 40 C.F.R. § 230.10(c)(3).
- 210. First, for the reasons explained above, the Corps failed to adequately evaluate the impact of the Project on the habitat of the endangered pallid sturgeon, and therefore necessarily has failed to evaluate the potential "loss of fish and wildlife habitat." 40 C.F.R. § 230.10(c)(3).
- 211. The Corps is also required to evaluate the loss of aquatic ecosystem value resulting from discharges that kill individuals of threatened and endangered species or interfere with their use of habitat for vital functions. 40 C.F.R. § 230.30(b). For the same reasons that the Corps' decision violates the requirement that no discharge can be authorized that would jeopardize an endangered or threatened species, the Corps' analysis of impacts is unsupported, arbitrary and capricious, and contrary to law.

- 212. Second, neither the CWA analysis nor the EIS it relies upon adequately evaluate the significant degradation that the Project will cause to the entire aquatic ecosystem of the Yellowstone. The Yellowstone River is often referred to as the longest undammed river in the contiguous United States and its floodplain is largely intact. The lower Yellowstone River has been identified by the Environmental Protection Agency as an aquatic resource of national importance.
- 213. The Corps failed to adequately analyze and support its conclusion that the Bypass Channel Alternative would not cause significant degradation to the Yellowstone River. Moreover, the Corps' conclusion that the Bypass Channel Alternative would not cause significant degradation to the Yellowstone River is contradicted by the available evidence. Under EPA's 404(b)(1) Guidelines, the Corps must deny authorization for the Project. 40 C.F.R §§ 230.10(c), 230.12(a)(3)(ii), (iv).
- 214. The Corps' regulations require it to conduct a balancing test to evaluate whether authorization of a discharge is in the public interest. 33 C.F.R. § 320.4(a)(1). That test requires a balancing of the reasonably foreseeable benefits and detriments of the proposed activity with respect to factors including fish and wildlife values. <u>Id</u>. The test requires the Corps to consider, where there are

unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work. 33 C.F.R. § 320.4(a)(2)(ii).

- 215. The Corps' 2016 CWA analysis does not appear to make an explicit public interest determination, as required by Corps regulations. To the extent such a finding is implied by the analysis of the 404 Guidelines, the finding is unsupported and arbitrary and capricious.
 - L. Plaintiffs' December 20, 2016 Notice of Intent to Sue to Remedy ESA Violations in Connection with the Lower Yellowstone Diversion Dam Fish Passage Project
- 216. Pursuant to 16 U.S.C. § 1540(g)(2)(A), on December 20, 2016—less than three weeks after the Corps and Reclamation issued their ROD authorizing the Intake Project—Plaintiffs submitted to the agencies a formal notice of intent to sue them for violations of the ESA in connection with the project concerning jeopardy, recovery, the environmental baseline, the effects analysis, harm and other forms of take, as well as other provisions of the ESA and its regulations. The agencies have not responded to Plaintiffs' December 20, 2016 notice letter and have not taken any action to cure the violations alleged therein. As required by the ESA, Plaintiffs waited more than 60 days from the date the agencies received Plaintiffs'

notice letter before filing this amended and supplemental Complaint incorporating those ESA claims.

PLAINTIFFS' CLAIMS FOR RELIEF

FIRST CAUSE OF ACTION (Violation of ESA Section 7(a)(2) – Duty to Ensure Against Jeopardy – Against the Corps)

- 217. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 218. Section 7(a)(2) of the ESA prohibits federal agencies from authorizing, funding, or carrying out any action that is "likely to jeopardize the continued existence" of any listed species. 16 U.S.C. § 1536(a)(2).
- 219. The Corps' operation of Fort Peck Dam is a discretionary agency action. The 2003 Biological Opinion concluded that the Corps' operation of Fort Peck Dam jeopardizes the continued existence of the endangered pallid sturgeon in violation of ESA section 7(a)(2).
- 220. In its 2003 Biological Opinion, FWS provided a reasonable and prudent alternative that, if fully implemented, would eliminate jeopardy to the pallid sturgeon from Fort Peck Dam operations. Specific to the pallid sturgeon, RPA elements II, VII, and VIII include requirements for modifications to the Corps' operation of Fort Peck Dam.

221. The Corps has not implemented elements II and VII of the pallid sturgeon RPA at Fort Peck Dam. With respect to RPA VIII, the Corps has completed a temperature control device reconnaissance study. In 2012, a document entitled, "Water Temperature Study and Preliminary Design of Submerged Weir" was completed. To the extent the Corps has completed a peer review of a feasibility study, as required by RPA VIII, the agency has not made it public. The Corps has not implemented a temperature control device at Fort Peck Dam. Accordingly, the Corps' ongoing operation of Fort Peck Dam, without all of the modifications required by the RPA for pallid sturgeon in the 2003 Biological Opinion, violates the Corps' mandatory ESA section 7 duty to avoid jeopardy. 16 U.S.C. § 1536(a)(2). The Corps' failure to ensure against jeopardy renders its operation of Fort Peck Dam arbitrary and capricious, an abuse of discretion, not in accordance with law, and without observance of procedure required by law, within the meaning of the APA, 5 U.S.C. § 706(2).

SECOND CAUSE OF ACTION (Violation of ESA Section 9(a)(1)(B) – Duty to Avoid "Take" – Against the Corps)

222. Each and every allegation set forth in this complaint is incorporated herein by reference.

- 223. Section 9(a)(1)(B) of the ESA, 16 U.S.C. § 1538(a)(1)(B), prohibits any person, including federal agencies, from "taking" an endangered species.

 "Take" is defined in the ESA to include "harm" to and "harassment" of an endangered species. 16 U.S.C. § 1532(19). "Harm" includes "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." 50 C.F.R. § 17.3. "Harass" "means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." Id.
- 224. The Corps' operation of Fort Peck Dam determines the timing, magnitude, frequency, and temperature of water released from the Dam. FWS concluded in the 2003 Biological Opinion that the Corps' Fort Peck Dam operations "take" the endangered pallid sturgeon through water releases that destroy its spawning and nursery habitat.
- 225. FWS provided the Corps with an incidental take statement in the 2003 Biological Opinion to legalize the Corps' take of pallid sturgeon. This incidental take statement is predicated upon compliance with the 2003 Biological Opinion, including all aspects of the reasonable and prudent alternative. The take statement

exempts compliance with the ESA section 9(a)(1)(B) take prohibition only if the Corps complies with all elements of the reasonable and prudent alternative.

- 226. The Corps has not complied with RPA elements II and VII for the pallid sturgeon with respect to its operation of Fort Peck Dam. With respect to RPA VIII, the Corps has completed a temperature control device reconnaissance study. In 2012, a document entitled, "Water Temperature Study and Preliminary Design of Submerged Weir" was completed. To the extent the Corps has completed a peer review of a feasibility study, as required by RPA VIII, the agency has not made it public. The Corps has not implemented a temperature control device at Fort Peck Dam. Because the Corps has not implemented all of the required elements of the RPA for the pallid sturgeon, the incidental take statement included in the 2003 Biological Opinion is not operative and does not exempt the Corps from the ESA section 9(a)(1)(B) take prohibition.
- 227. The Corps is violating ESA section 9(a)(1)(B) by operating Fort Peck Dam without all of the modifications required by the RPA for the pallid sturgeon in the 2003 Biological Opinion.

THIRD CAUSE OF ACTION

(Violation of ESA – Failure to Reinitiate Consultation on the Corps' Fort Peck Dam Operations – Against the Corps and FWS)

- 228. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 229. Federal agencies and FWS must reinitiate consultation when the action agency maintains discretionary involvement or control over the action and (1) the amount of take specified in the incidental take statement is exceeded; (2) new information "reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;" (3) the action is "subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion;" or (4) a new species is listed or critical habitat is designated. 50 C.F.R. § 402.16.
- 230. The Corps retains discretionary involvement and control over the operation of Fort Peck Dam.
- 231. Starting in 2009, the Corps and FWS repeatedly agreed to modify the action consulted upon in the 2003 Biological Opinion in a way that affects the pallid sturgeon and was not considered in the earlier biological opinion. Through an exchange of several letters, the Corps and FWS purported to eliminate a key element of the RPA for Fort Peck Dam operations—RPA VII for the pallid

sturgeon (flow enhancements at Fort Peck Dam)—and replace it with an entirely new requirement under which the Corps would attempt to cure Reclamation's violations of the ESA related to Reclamation's operation of Intake Dam. The Corps and FWS repeatedly "clarified" and "amended" this new action and new RPA several more times after 2009. As part of the 2015 Intake Project approval process, the Corps and FWS failed to consult under ESA section 7(a)(2) regarding any of these amendments, modifications, or clarifications to the action consulted upon in the 2003 Biological Opinion and the RPA specified in the 2003 Biological Opinion.

232. The purported amendments and clarifications to the action consulted upon in the 2003 Biological Opinion and the 2003 RPA for the pallid sturgeon constituted "new information" that "reveals effects of the action that may affect listed species . . . in a manner or to an extent not previously considered." 50 C.F.R. § 402.16(b). The purported amendments and clarifications to the action consulted upon in the 2003 Biological Opinion and the 2003 RPA for the pallid sturgeon also demonstrated the action has been "subsequently modified in a manner that causes an effect to the listed species . . . that was not considered in the biological opinion." 50 C.F.R. § 402.16(c).

233. The Corps' and FWS's failure to reinitiate and complete formal consultation regarding the purported amendments and clarifications to the action consulted upon in the 2003 Biological Opinion, and the RPA specified in the 2003 Biological Opinion, violates 16 U.S.C. § 1536(a)(2), and its implementing regulations, particularly 50 C.F.R. § 402.16(b) and (c). The Corps and FWS's modification of the action consulted upon in the 2003 Biological Opinion and RPA VII specified in the 2003 Biological Opinion without formal consultation under section 7(a)(2) of the ESA was arbitrary, capricious, an abuse of discretion and otherwise not in accordance with the ESA. 5 U.S.C. § 706(2)(A).

FOURTH CAUSE OF ACTION (Violation of ESA Section 7(a)(2) – Violation of Duty to Ensure Against Jeopardy – Against Reclamation)

- 234. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 235. Section 7(a)(2) of the ESA prohibits federal agencies from taking any action that is "likely to jeopardize the continued existence" of any listed species.

 16 U.S.C. § 1536(a)(2). To fulfill this substantive mandate, section 7(a)(2) requires federal agencies to complete a consultation with the appropriate wildlife agency—here FWS—before undertaking a discretionary "agency action" that

"may affect" a listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. §§ 402.03, 402.14(a).

- 236. Reclamation owns and operates Intake Dam as part of the Lower Yellowstone Project. Reclamation's ongoing operation of Intake Dam is a discretionary "agency action" that "may affect" the pallid sturgeon.
- 237. After decades of failing to properly undertake and complete formal consultation with FWS concerning Reclamation's Intake Dam operation activities while the pallid sturgeon slipped into an ever more precarious state as a result of those activities, Reclamation finally completed a formal section 7(a)(2)consultation with FWS regarding the interim operation of the existing Intake Dam, for the next two to three years pending completion of the Intake Project, in July 2015 and completed a similar consultation in November 2016 in response to the Court's injunction order. As currently operated, the existing Intake Dam and the periodic re-building of the Dam jeopardizes the continued existence of the pallid sturgeon. The existing Intake Dam will continue to jeopardize the existence of the pallid sturgeon so long as its operations remain unchanged and it is continually rebuilt. Accordingly, Reclamation's operation of the existing Intake Dam for the next two to three years without any modification to provide for sturgeon passage or to create conditions in which natural sturgeon reproduction can take place

jeopardizes the continued existence of the pallid sturgeon, and unlawfully impedes both the species' survival and recovery.

- 238. Reclamation is violating its substantive ESA section 7(a)(2) duty to ensure that it is not causing jeopardy to the pallid sturgeon. Reclamation's current operation and continual rebuilding of Intake Dam blocks all but a handful of pallid sturgeon from accessing spawning and nursery habitat that is essential to their survival and recovery. As a result, pallid sturgeon must spawn downstream of Intake Dam in the Yellowstone River in an area that is too close to Lake Sakakawea for the larvae to survive. Intake Dam prevents pallid sturgeon from successfully reproducing in the Yellowstone River. The existence and current operation of Intake Dam causes jeopardy to the pallid sturgeon because it reduces the likelihood of the pallid sturgeon's survival or recovery in the wild by "reducing the reproduction, numbers, or distribution" of the species, especially in light of FWS's prior projection that this population would be extirpated in the very near future without modifications to Reclamation's dam operation actions. 50 C.F.R. § 402.02 (defining jeopardy).
- 239. In addition, to the extent that Reclamation relies on the 2016
 Biological Opinion, which is itself unlawful, arbitrary, and unsupported by the best

available science as explained below in Plaintiffs' Twelfth Claim, Reclamation's reliance on this Biological Opinion violates the ESA and is arbitrary.

240. Accordingly, Reclamation's ongoing operation of Intake Dam violates its substantive ESA section 7(a)(2) duty to avoid jeopardy. 16 U.S.C. § 1536(a)(2). Reclamation's failure to ensure against jeopardy renders its operations of Intake Dam arbitrary and capricious, an abuse of discretion, not in accordance with law, and without observance of procedure required by law, within the meaning of the APA, 5 U.S.C. § 706(2).

FIFTH CAUSE OF ACTION (Violation of ESA Section 9(a)(1) – Duty to Avoid "Take" – Against Reclamation)

- 241. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 242. Section 9(a)(1)(B) of the ESA, 16 U.S.C. § 1538(a)(1)(B), prohibits any person, including federal agencies, from "taking" an endangered species. "Take" is defined in the ESA to include "harm" to or "harassment" of an endangered species. 16 U.S.C. § 1532(19). "Harm" includes "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." 50 C.F.R. § 17.3. "Harass" "means an intentional or

negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." Id.

- 243. Reclamation owns and operates Intake Dam as part of the Lower Yellowstone Project. Reclamation's operation of Intake Dam blocks all but a handful of pallid sturgeon from accessing spawning and nursery habitat that is essential to their survival and recovery. As a result, pallid sturgeon must spawn downstream of Intake Dam in the Yellowstone River in an area that is too close to Lake Sakakawea for the larvae to survive. Intake Dam prevents pallid sturgeon from successfully reproducing in the Yellowstone River. Reclamation's operation of Intake Dam "significantly impair[s] essential behavior patterns, including breeding, feeding, and sheltering." 50 C.F.R. § 17.3.
- 244. In 2016, Reclamation completed an ESA Section 7 consultation with FWS regarding the continued operation of the Intake Dam under current management conditions for the next two to three years until the proposed Intake Project is completed. FWS's biological opinion confirmed that continued operation of the Intake Dam for the next two to three years will "take" an estimated 32 adult pallid sturgeon by impairing their reproduction. FWS issued Reclamation an incidental take statement authorizing this amount of take as part of the 2016

Biological Opinion. However, because FWS's biological opinion authorizing this incidental take failed to use the best available science, violated the standards found in the ESA, and is otherwise arbitrary and capricious as discussed in Plaintiffs' Twelfth Cause of Action, the incidental take statement is rendered inoperative and Reclamation's ongoing take remains illegal.

245. Accordingly, Reclamation is violating ESA section 9(a)(1)(B) by continuing to operate the Intake Dam without restoring pallid sturgeon passage. Reclamation's continued operation of Intake Dam under current management conditions for the next two to three years is arbitrary and capricious, an abuse of discretion, and not in accordance with law, within the meaning of the APA, 5 U.S.C. § 706(2).

SIXTH CAUSE OF ACTION (Violation of NEPA – 2015 Final Supplemental EA and FONSI – Against the Corps and Reclamation)

- 246. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 247. The Corps and Reclamation prepared the 2015 Final Supplemental Environmental Assessment for the Intake Project and signed a Finding of No Significant Impact adopting the Bypass Channel Alternative on April 1, 2015.

- 248. NEPA requires all federal agencies, including the Corps and Reclamation, to take a "hard look" at the direct, indirect, and cumulative impacts of proposed major federal actions. 42 U.S.C. § 4332(2)(C)(i)-(ii); 40 C.F.R. § 1502.16, 1508.25(c).
- 249. The Corps and Reclamation's 2015 Final Supplemental EA failed to take a "hard look" at the direct, indirect, and cumulative effects of the Bypass Channel Alternative as required by NEPA. The agencies failed to adequately evaluate whether the Bypass Channel Alternative is likely to facilitate pallid sturgeon recovery in the upper Missouri River basin and therefore meet the agencies' ESA obligations. This analysis would include, without limitation, whether the plan will provide for the pallid sturgeon to successfully naturally reproduce in the Yellowstone River and whether it would facilitate the restoration of a self-sustaining, viable population of the wild pallid sturgeon population in the upper Missouri River basin.
- 250. NEPA requires that an EIS must be prepared if an action "may" have a significant effect on the environment.
- 251. The Bypass Channel Alternative may, and is likely to, result in a significant impact to the environment. Among other things, the success or failure of the Intake Project may determine the fate of the wild pallid sturgeon population

in the upper Missouri River basin, the impacts of the Intake Project are highly uncertain and involve unknown risks, the Project threatens a violation of the ESA, and the project will affect an ecologically critical area. The agencies violated NEPA by failing to prepare an EIS for the Intake Project as part of their 2015 decision-making process.

- 252. NEPA requires that agencies proposing major Federal actions significantly affecting the quality of the human environment consider "alternatives to the proposed action." 42 U.S.C. § 4332(2)(C)(iii). NEPA's implementing regulations augment this duty, providing that agencies must "[r]igorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14(a).
- 253. The purpose of the Intake Project is to address the agencies' consultation, recovery, and conservation obligations under the ESA. To the extent the agencies limited their purpose for the Intake Project to engineering criteria related to "fish passage," this purpose was unlawfully narrow. The agencies arbitrarily eliminated from detailed study any action alternatives that would have provided the greatest likelihood of success for pallid sturgeon recovery—removing the existing dam and restoring an open river for the pallid sturgeon and other native fish species. The agencies also failed to evaluate alternatives that, among other things, would require or assist water conservation or efficiency

improvements. The Corps and Reclamation violated NEPA as part of their 2015 decision-making process by failing to consider a reasonable range of alternatives in the Final EA and FONSI for the Intake Project.

254. For at least these reasons, the Corps and Reclamation's 2015 Final EA and FONSI for the Intake Project violated NEPA, and was arbitrary and capricious, an abuse of discretion, without observance of procedures required by law, and not in accordance with law, pursuant to the APA. 5 U.S.C. § 706(2).

SEVENTH CAUSE OF ACTION

(Violation of ESA Section 7(a)(2) – Violation of Duty to Consult and Duty to Ensure Against Jeopardy During the 2015 Decision-making Process – Against the Corps)

- 255. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 256. Section 7(a)(2) of the ESA prohibits federal agencies from taking any action that is "likely to jeopardize the continued existence" of any listed species.

 16 U.S.C. § 1536(a)(2). To fulfill this substantive mandate, section 7(a)(2) requires federal agencies to complete a consultation with the appropriate wildlife agency—here FWS—before undertaking a discretionary "agency action" that "may affect" a listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. §§ 402.03, 402.14(a). If the proposed action is "likely to adversely affect" a listed species, the action agency and FWS must engage in formal consultation. 50 C.F.R. § 402.14.

- 257. The Corps and Reclamation initially authorized the construction, funding, and implementation of the Bypass Channel Alternative for the Intake Project on April 1, 2015. The Corps' April 1, 2015 decision also represented a final decision to implement the Bypass Channel Alternative in lieu of complying with RPA VII for Fort Peck Dam in the 2003 Biological Opinion.
- 258. The Corps' decision to authorize the construction, funding, and implementation of the Bypass Channel Alternative is a discretionary agency action that "may affect" and is "likely to adversely affect" the endangered pallid sturgeon. As a result, the Corps was required to complete a formal ESA section 7 consultation with FWS on the effects of the Project before its authorization. The ESA requires that such a consultation include, among other things, an analysis of whether the Bypass Channel Alternative, as a substitute for Fort Peck Dam modifications, will ensure that the Corps' operations of Fort Peck Dam will not cause jeopardy to the pallid sturgeon.
- 259. As part of the 2015 decision-making process, the Corps did not initiate or complete consultation with FWS on the effects of the authorization of the Bypass Channel Alternative for the Intake Project. Nor, during the 2015 process, did the Corps initiate or complete consultation with FWS on the effects of the authorization of the Bypass Channel Alternative for the Intake Project in lieu of

satisfying its obligations under the original RPA VII. The Corps' 2015 authorization of the Intake Project did not comply with or fulfill RPA VII for Fort Peck Dam in the 2003 Biological Opinion. The Corps' reliance on the "amendments" to the 2003 RPA was unlawful and did not excuse the Corps' failure to complete an ESA consultation.

260. The Corps' failure to initiate and complete a formal consultation on the authorization of the construction, funding, and implementation of the Bypass Channel Alternative for the Intake Project as part of the 2015 decision-making process was a violation of its mandatory duty to consult under ESA section 7(a)(2), 16 U.S.C. 1536(a)(2), and a violation of its mandatory duty to ensure its actions do not cause jeopardy to an endangered species, within the meaning of the ESA citizen suit provision. 16 U.S.C. §1540(g)(1)(A).

EIGHTH CAUSE OF ACTION

(Violation of ESA Section 7(a)(2) – Violation of Duty to Ensure Against Jeopardy in Connection with the 2015 Intake Project Approval – Against Reclamation)

- 261. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 262. Section 7(a)(2) of the ESA prohibits federal agencies from taking any action that is "likely to jeopardize the continued existence" of any listed species.

 16 U.S.C. § 1536(a)(2). To fulfill this substantive mandate, section 7(a)(2)

requires federal agencies to complete a consultation with the appropriate wildlife agency—here FWS—before undertaking a discretionary "agency action" that "may affect" a listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. §§ 402.03, 402.14(a). If the proposed action is "likely to adversely affect" a listed species, the action agency and FWS must engage in formal consultation. 50 C.F.R. § 402.14.

- 263. On April 1, 2015, the Corps and Reclamation initially authorized the construction, funding, and implementation of the Bypass Channel Alternative for the Intake Project. The Intake Project is a discretionary action by Reclamation and will adversely affect the pallid sturgeon.
- 264. Accordingly, as required by ESA Section 7(a)(2) Reclamation engaged in formal consultation with FWS concerning the 2015 approval of the Intake Project. This consultation was completed on July 10, 2015 when FWS provided Reclamation with the 2015 biological opinion.
- 265. In approving the Intake Project, Reclamation failed to ensure its action would not jeopardize the pallid sturgeon by reducing the likelihood of its survival or recovery in the wild by "reducing the reproduction, numbers, or distribution" of the species. 50 C.F.R. § 402.02 (defining jeopardy). The current operation of Intake Dam jeopardizes the continued existence of the pallid sturgeon by blocking access to its spawning habitat above the Dam under nearly all river

flow conditions and thus prohibiting the species from reproducing successfully. To remove this existing jeopardy situation, Reclamation must ensure that the Intake Project will facilitate recovery of the species, including by allowing sufficient numbers of adult sturgeon to pass upstream to spawn and ensuring that these adults and sufficient numbers of resulting larvae can then return downstream past the site without injury such that the pallid sturgeon is able to re-establish a viable, self-sustaining population. As proposed in the 2015 decision documents approved by Reclamation, the Intake Project did not ensure that these conditions would result. Rather, Reclamation relied upon FWS's July 2015 Biological Opinion, which was unsupported by the best available science and does not meet ESA standards as explained in Plaintiffs' Tenth Claim.

266. Accordingly, Reclamation's 2015 approval of the Intake Project violated its substantive ESA section 7(a)(2) duty to avoid jeopardy. 16 U.S.C. § 1536(a)(2). Reclamation's failure to ensure against jeopardy renders its 2015 approval of the Intake Project arbitrary and capricious, an abuse of discretion, not in accordance with law, and without observance of procedure required by law, within the meaning of the APA, 5 U.S.C. § 706(2).

NINTH CAUSE OF ACTION (Violation of CWA Section 404 – 2015 CWA Statement of Findings – Against the Corps)

- 267. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 268. Under the EPA's section 404(b)(1) Guidelines, the Corps may not authorize a discharge of fill or dredge material into the waters of the United States unless the applicant demonstrates that: (1) the activity will not jeopardize the continued existence of an endangered species under the ESA, 40 C.F.R. §§ 230.10(b)(3), 230.12(a)(3)(ii)); (2) there is no practicable alternative which would have less adverse impact and does not have other significant adverse environmental consequences, 40 C.F.R. §§ 230.10(a), 230.12(a)(3)(i)); and (3) the discharge will not result in significant degradation to waters of the U.S., 40 C.F.R. § 230.10(c), 230.12(a)(3)(ii)). Where there does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the Guidelines for permit issuance, the Corps must not issue the permit. 40 C.F.R. § 230.12(a)(3)(iv).
- 269. The substantive and procedural requirements for permit issuance under CWA section 404 apply to the Corps when it seeks authorization for its own activities that discharge dredge or fill materials into the waters of the United States.

- See 33 C.F.R. Parts 335-337. Instead of issuing a permit, the Corps' decision to authorize its own discharge is finalized in a Statement of Findings. 33 C.F.R. §§ 336.1(a) and 337.6.
- 270. On June 18, 2015, as part of the 2015 decision-making process, the Corps signed a Statement of Findings authorizing the discharge of fill materials into the Yellowstone River, its natural side channel, and associated wetlands in connection with the construction and implementation of the "Bypass Channel Alternative." The discharges encompassed placement of the new concrete dam at Intake, the placement of fill between the old and new dam structures, the plugging of the natural side channel, and the construction of an artificial bypass channel.
- 271. The Statement of Findings failed to adequately assess and support its conclusion that the Intake Project will not cause jeopardy to the pallid sturgeon, and the available evidence at the time of the decision contradicted this conclusion. Consequently, the SOF violated 40 C.F.R. §§ 230.10(b)(3), 230.12(a)(3)(ii), and 230.12(a)(3)(iv), and was arbitrary and capricious.
- 272. The Statement of Findings failed to adequately assess and support the Corps' conclusion that there are no less environmentally damaging practicable alternatives that would achieve the purposes of the Project, and the available evidence contradicted this conclusion. Consequently, the 2015 SOF authorizing

the discharges violated 40 C.F.R. §§ 230.10(a), 230.12(a)(3)(ii), and 230.12(a)(3)(iv), and was arbitrary and capricious.

- 273. The 2015 Statement of Findings failed to adequately assess and support the Corps' conclusion that the Bypass Channel Alternative will not cause significant degradation to the Yellowstone River, including impacts on the pallid sturgeon, floodplain impacts, and the loss of the natural side channel and wetlands, and the available evidence contradicts this conclusion.
- 274. The 2015 SOF therefore violated 40 C.F.R. §§ 230.10(c), 230.12(a)(3)(ii), and (iv), and was arbitrary and capricious.
- 275. The Statement of Findings arbitrarily and unlawfully concluded that the Bypass Channel Alternative did not involve any significant negative impact to the public interest factors, and that there were no available reasonable alternatives to the Bypass Channel Alternative that would achieve the project's purpose.
- 276. The public interest balancing in the 2015 SOF therefore violated 33 C.F.R. § 320.4(a) and was arbitrary and capricious.
- 277. For at least these reasons, the Corps' 2015 Statement of Findingsviolated section 404 of the Clean Water and its implementing regulations.Accordingly, the 2015 Statement of Findings constituted agency action that wasarbitrary and capricious, an abuse of discretion, without observance of procedures

required by law, and not in accordance with law, pursuant to the APA. 5 U.S.C. § 706(2).

TENTH CAUSE OF ACTION (Violation of ESA Section 7(a)(2) and APA – 2015 Biological Opinion and Incidental Take Statement – Against FWS)

- 278. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 279. On July 10, 2015, as part of the 2015 decision-making process, FWS prepared a biological opinion and Incidental Take Statement after engaging in formal consultation with Reclamation concerning interim operation and maintenance of the Intake Dam, the construction of the Intake Project, and the future operation of the Intake Project.
- 280. Section 7(a)(2) of the ESA requires that in preparing biological opinions FWS must use the best available scientific information. 16 U.S.C. § 1536(a)(2).
- 281. The 2015 Biological Opinion failed to apply the proper standard for evaluating jeopardy under the ESA, failed to use the best available science, was unsupported and contradicted by the best available science, and failed to provide a "rational connection" between the facts found and the agency's conclusions.

- 282. The 2015 Incidental Take Statement ("ITS") included in the 2015 Biological Opinion violated ESA standards, was unsupported and contradicted by the best available science, and arbitrarily relied on a surrogate species to measure incidental take.
- 283. The 2015 Biological Opinion and ITS constituted agency action that is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with the ESA and its implementing regulations in violation of APA Sections 706(2)(A), (D). 5 U.S.C. §§ 706(2)(A), (D).

ELEVENTH CAUSE OF ACTION (Violation of NEPA – 2016 EIS and ROD – Against the Corps and Reclamation)

- 284. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 285. In response to the Court's September 2015 injunction order, the Corps and Reclamation issued the 2016 EIS adopting the Bypass Channel Alternative on October 21, 2016. The agencies issued their ROD approving the Intake Project on December 2, 2016.
- 286. NEPA requires all federal agencies, including the Corps and Reclamation, to take a "hard look" at the direct, indirect, and cumulative impacts

of proposed major federal actions. 42 U.S.C. § 4332(2)(C)(i)-(ii); 40 C.F.R. § 1502.16, 1508.25(c).

- 287. The Corps and Reclamation's 2016 EIS failed to take a "hard look" at the direct, indirect, and cumulative effects of the Bypass Channel Alternative as required by NEPA. The agencies failed to adequately evaluate whether the Bypass Channel Alternative is likely to facilitate pallid sturgeon recovery in the upper Missouri River basin and therefore meet the agencies' ESA obligations, as well as the project's stated purpose and need of "improv[ing] pallid sturgeon fish passage and ecosystem restoration. . . ." This analysis would include, without limitation, whether the plan will provide for the pallid sturgeon to successfully naturally reproduce in the Yellowstone River and whether it would facilitate the restoration of a self-sustaining, viable population of the wild pallid sturgeon population in the upper Missouri River basin. The EIS's failure to analyze these key resource impacts and essential questions violates NEPA and its regulations, and is arbitrary and capricious.
- 288. The Bypass Channel Alternative is likely to result in significant impacts to the environment, but the 2016 EIS in key respects relies on speculation and conjecture that runs counter to the scientific evidence presented by independent scientists and other stakeholders. Not only will the success or failure

of the Intake Project likely determine the fate of the wild pallid sturgeon population in the upper Missouri River basin, but the impacts of the Intake Project are highly uncertain and involve unknown risks as the EIS repeatedly concedes. In a situation involving such uncertainty and speculation—and where the survival of a species hangs in the balance—it was incumbent on the Corps and Reclamation to obtain this "incomplete information" because it "is essential to a reasoned choice among alternatives," as required by NEPA and its regulations. See 40 C.F.R. § 1502.22(a). By failing to obtain critical information that is essential to a reasoned choice between alternatives—and failing even to explain the methods by which such information could be obtained or generated and the costs to do so—the agencies acted contrary to NEPA and its regulations, and in an arbitrary and capricious manner.

289. Despite robust scientific opinion and evidence indicating that an alternative removing the existing weir and restoring a natural, free-flowing river would be best for the pallid sturgeon and its habitat, the Corps and Reclamation determined in their 2016 EIS and ROD that the "environmentally preferable" alternative is the no-action alternative, which the EIS described as an action that would continue to indefinitely block fish passage and thus worsen the current jeopardy situation until the pallid sturgeon population is extirpated. The agencies

stated that this purportedly "environmentally preferable" alternative "does not meet the purpose and need of the project and is therefore not the preferred alternative." As with many other conclusions reached by the agencies in the 2016 EIS and ROD, the determination of the "environmentally preferable" alternative is unsupported, arbitrary, and skewed the NEPA analysis for the public and the decision-makers, thereby flouting NEPA and its regulations.

290. The 2016 EIS violates NEPA in several additional respects. At minimum, the Final EIS fails to take a "hard look" at the impacts of the Intake Project on pallid sturgeon and whether the Intake Project is likely to achieve the Project's underlying purpose; the Final EIS adopts an unlawfully narrow purpose and need for the Intake Project that is inconsistent with the agencies' NEPA obligations and contrary to the substantive duties imposed on the agencies under the circumstances by the ESA; the Final EIS arbitrarily considers a no-action alternative that would continue an admittedly illegal practice and thus is not a viable alternative; the Final EIS utilizes an improper baseline that assumes that ongoing jeopardy will continue if the Intake Project is not implemented; the Final EIS arbitrarily fails to evaluate, or even acknowledge, as part of the baseline or as a cumulative effect that the Missouri River is not going to be restored; the Final EIS relies on uncertainties and speculation in reaching its conclusions rather than

obtaining crucial information to inform the decision-making process for the agencies and the public; the Final EIS arbitrarily relied on the Fish Passage Connectivity Index to support its cost-effectiveness analysis; the cost-effectiveness analysis is otherwise unsupported and arbitrary; the Final EIS fails to adequately analyze, let alone disclose, the impacts of the Intake Project on larval mortality; the Final EIS's cost analysis is unsupported by available information and arbitrary; and the Final EIS has adopted adaptive mitigation measures that are unfunded, uncertain, and thus arbitrary under NEPA. For all of these reasons, the 2016 EIS both violates NEPA in myriad ways and is arbitrary and capricious on many independent grounds.

291. For at least these reasons, the Corps and Reclamation's EIS and ROD for the Intake Project violate NEPA. Accordingly, the Intake Project constitutes agency action that is arbitrary and capricious, an abuse of discretion, without observance of procedures required by law, and not in accordance with law, pursuant to the APA. 5 U.S.C. § 706(2).

TWELFTH CAUSE OF ACTION (Violation of ESA Section 7(a)(2) and APA – 2016 Biological Opinion and Incidental Take Statement – Against FWS)

292. Each and every allegation set forth in this complaint is incorporated herein by reference.

- 293. On November 18, 2016, FWS prepared a biological opinion and Incidental Take Statement ("2016 ITS") after engaging in formal consultation with Reclamation and the Corps concerning interim operation and maintenance of the Intake Dam, the construction of the Intake Project, and the future operation of the Intake Project.
- 294. Section 7(a)(2) of the ESA requires that in preparing biological opinions FWS must use the best available scientific information. 16 U.S.C. § 1536(a)(2).
- 295. The 2016 Biological Opinion fails to apply the proper standards for evaluating jeopardy under the ESA, fails to use the best available science, fails to provide the legally required analysis of this Project's impacts on the pallid sturgeon's recovery prospects, is unsupported and contradicted by the best available science, and fails to provide a "rational connection" between the facts found and the agency's conclusions. For all of these reasons, the 2016 Biological Opinion is arbitrary, capricious, contrary to law, and not in accordance with procedures required by law.
- 296. The 2016 ITS also violates ESA standards, is unsupported and contradicted by the best available science, and arbitrarily relies on a surrogate species to measure incidental take. The 2016 Biological Opinion and ITS

represent agency action that is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with the ESA and its implementing regulations in violation of APA Sections 706(2)(A), (D). 5 U.S.C. §§ 706(2)(A), (D).

THIRTEENTH CAUSE OF ACTION

(Violation of ESA Section 7(a)(2) – Violation of Duty to Ensure Against Jeopardy in Connection with the 2016 Bypass Channel Alternative – Against Reclamation and the Corps)

- 297. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 298. Section 7(a)(2) of the ESA prohibits federal agencies from taking any action that is "likely to jeopardize the continued existence" of any listed species.

 16 U.S.C. § 1536(a)(2). To fulfill this substantive mandate, section 7(a)(2) requires federal agencies to complete a consultation with the appropriate wildlife agency—here FWS—before undertaking a discretionary "agency action" that "may affect" a listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. §§ 402.03, 402.14(a). If the proposed action is "likely to adversely affect" a listed species, the action agency and FWS must engage in formal consultation. 50 C.F.R. § 402.14.
- 299. The Corps and Reclamation re-authorized the construction, funding, and implementation of the Bypass Channel Alternative for the Intake Project on December 2, 2016 The Intake Project is a discretionary action by Reclamation and will adversely affect the pallid sturgeon.

- 300. Accordingly, as required by ESA Section 7(a)(2), Reclamation and the Corps engaged in formal consultation with FWS concerning the Intake Project. This consultation was completed on November 18, 2016 when FWS provided Reclamation with a biological opinion, as described in Plaintiffs' Twelfth Claim.
- 301. In approving the Intake Project in 2016, Reclamation and the Corps failed to ensure their action with respect to the Intake Project would not jeopardize the pallid sturgeon by reducing the likelihood of its survival or recovery in the wild or by "reducing the reproduction, numbers, or distribution" of the species. 50 C.F.R. § 402.02 (defining jeopardy). The current operation of Intake Dam jeopardizes the continued existence of the pallid sturgeon by blocking access to its spawning habitat above the Dam under nearly all river flow conditions and thus prohibiting the species from reproducing successfully. To remove this existing jeopardy situation, Reclamation must ensure that the Intake Project will facilitate recovery of the species, including by allowing sufficient numbers of adult sturgeon to pass upstream to spawn and ensuring that these adults and sufficient numbers of resulting larvae can then return downstream past the site without injury such that the pallid sturgeon is able to re-establish a viable, self-sustaining population. As currently designed, the Intake Project does not ensure that these conditions will result. Rather, Reclamation has relied upon FWS's November 2016 Biological

Opinion, which is unsupported by the best available science and does not satisfy the ESA or its regulations, as further described in Plaintiffs' Twelfth Claim above.

302. Accordingly, Reclamation and the Corps' 2016 approval of the Intake Project violates their substantive ESA section 7(a)(2) duty to avoid jeopardy. 16 U.S.C. § 1536(a)(2). Reclamation's and the Corps' failure to ensure against jeopardy renders their 2016 approval of the Intake Project arbitrary and capricious, an abuse of discretion, not in accordance with law, and without observance of procedure required by law, within the meaning of the APA, 5 U.S.C. § 706(2).

FOURTEENTH CAUSE OF ACTION (Violation of CWA Section 404 and APA – 2016 CWA Analysis – Against the Corps)

- 303. Each and every allegation set forth in this complaint is incorporated herein by reference.
- 304. Under the EPA's section 404(b)(1) Guidelines, the Corps may not authorize a discharge of fill or dredge material into the waters of the United States unless the applicant demonstrates that: (1) the activity will not jeopardize the continued existence of an endangered species under the ESA, 40 C.F.R. §§ 230.10(b)(3), 230.12(a)(3)(ii)); (2) there is no practicable alternative which would have less adverse impact and does not have other significant adverse environmental consequences, 40 C.F.R. §§ 230.10(a), 230.12(a)(3)(i)); and (3) the

discharge will not result in significant degradation to waters of the U.S., 40 C.F.R. § 230.10(c), 230.12(a)(3)(ii)). Where there does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the Guidelines for permit issuance, the Corps must not issue the permit. 40 C.F.R. § 230.12(a)(3)(iv).

305. The substantive and procedural requirements for permit issuance under CWA section 404 apply to the Corps when it seeks authorization for its own activities that discharge dredge or fill materials into the waters of the United States. See 33 C.F.R. Parts 335-337. Instead of issuing a permit, the Corps' decision to authorize its own discharge is finalized in a Statement of Findings or similar CWA analysis. 33 C.F.R. §§ 336.1(a) and 337.6.

306. In October 2016, the Corps finalized its CWA 404(b)(1) Analysis authorizing the discharge of fill materials into the Yellowstone River, its natural side channel, and associated wetlands in connection with the construction and implementation of the "Bypass Channel Alternative." The discharges encompass placement of the new concrete dam at Intake, the placement of fill between the old and new dam structures, the plugging of the natural side channel, and the construction of an artificial bypass channel.

- 307. The CWA Analysis fails to adequately assess and support its conclusion that the Intake Project will not cause jeopardy to the pallid sturgeon, and the available evidence contradicts this conclusion. Consequently, the Corps' 2016 CWA Analysis violates 40 C.F.R. §§ 230.10(b)(3), 230.12(a)(3)(ii), and 230.12(a)(3)(iv), and is arbitrary and capricious.
- 308. In addition, the Corps' CWA Analysis, like the EIS, unlawfully narrows the purpose of the Project. The underlying purpose of the Project is to bring Reclamation's Intake Dam operations into compliance with the ESA and to bring the Corps' Fort Peck Dam operations into compliance with the ESA. The Corps did not evaluate whether the Bypass Channel Alternative will achieve those objectives. In fact, the available evidence demonstrates that the Bypass Channel Alternative likely will fail to achieve the underlying purpose and need for the Project. Further, to the extent the Corps' statement of the purpose and need is appropriate, the Corps' conclusion that the Bypass Channel Alternative will fulfill the Project's purpose is also unsupported, and arbitrary and capricious, because it relies on the same inadequate analysis found in the EIS.
- 309. The Corps' analysis of the "least environmentally damaging practicable alternative" is also unlawful and unsupported. For example, the Corps arbitrarily relied on the "Fish Passage Connectivity Index" ("FPCI") to support a

cost-effectiveness conclusion that, in the Corps' estimation, justified eliminating the "Multiple Pumps" Alternative from consideration as a practicable alternative. This reliance is misplaced for numerous reasons. With respect to relative environmental impacts—the key issue for determining whether an alternative is the "least damaging"—the FPCI does not represent a rational, scientific basis to differentiate between the environmental impacts of each alternative. Even if the FPCI model was an appropriate basis to draw this conclusion, as applied here, the inputs to the FPCI model were arbitrary and contrary to the best available science. Further, in primarily relying on the FPCI, the Corps ignored the uncontroverted evidence that the "Multiple Pumps" Alternative is the least damaging alternative. Moreover, the Corps' cost-effectiveness conclusions based on the FPCI model are arbitrary and unsupported. In addition, even if the FPCI model was a valid basis on which to measure cost-effectiveness (which it is not), the Corps applied the wrong legal standard for determining the "least environmentally damaging practicable alternative." The Corps unlawfully failed to determine which alternative was least environmentally damaging based on environmental impacts alone. The Corps also failed to support its conclusion that the "Multiple Pumps" Alternative is not practicable. For at least these reasons, the Corps acted arbitrarily and capriciously, and under EPA's 404(b)(1) Guidelines, the Corps must deny authorization for the Project. 40 C.F.R §§ 230.10(a), 230.12(a)(3)(i), (iv).

- 310. The Corps' CWA Analysis fails to adequately assess and support the Corps' conclusion that the Bypass Channel Alternative will not cause significant degradation to the Yellowstone River, including impacts on the pallid sturgeon, floodplain impacts, and the loss of the natural side channel and wetlands, and the available evidence contradicts this conclusion. The 2016 CWA Analysis therefore violates 40 C.F.R. §§ 230.10(c), 230.12(a)(3)(ii), and (iv), and is arbitrary and capricious.
- 311. The Corps' 2016 CWA Analysis fails to make an explicit public interest determination, as required by Corps regulations. To the extent such a finding is implied by the Corps' analysis of the 404 Guidelines, the finding is unsupported by available information. For both of these reasons, the Corps' public interest balancing—to the extent the Corps even made this legally required finding—violates the CWA, its regulations (33 C.F.R. § 320.4(a)), and is arbitrary and capricious.
- 312. For at least these reasons, the Corps' 2016 CWA Analysis and the agency's authorization of dredge and fill activities in connection with the Intake Project violates section 404 of the Clean Water and its implementing regulations.

Accordingly, the CWA Analysis constitutes agency action that is arbitrary and capricious, an abuse of discretion, without observance of procedures required by law, and not in accordance with law, pursuant to the APA. 5 U.S.C. § 706(2).

PRAYER FOR RELIEF

THEREFORE, Plaintiffs respectfully request that the Court:

- 313. Declare that the Corps is violating ESA section 7(a)(2), 16 U.S.C. § 1536(a)(2), and ESA section 9(a)(1)(B), 16 U.S.C. § 1538(a)(1)(B), through its operation of Fort Peck Dam;
- 314. Declare that Reclamation is violating ESA section 7(a)(2), 16 U.S.C. § 1536(a)(2), and ESA section 9(a)(1)(B), 16 U.S.C. § 1538(a)(1)(B), through its operation of Intake Diversion Dam;
- 315. Declare that FWS and the Corps violated the ESA and its implementing regulations by failing to re-initiate and complete consultation in compliance with ESA section 7(a)(2), 16 U.S.C. §1536(a)(2), and its implementing regulations, 50 C.F.R. § 402.16(b) and (c), with respect to the amendments and clarifications, beginning in 2009, to the reasonable and prudent alternative for the pallid sturgeon at Fort Peck Dam;
- 316. Declare that the Corps' and Reclamation's April 2015 FONSI and Final Supplemental EA authorizing the Bypass Channel Alternative for the Intake

Project, as well as the Corps' and Reclamation's October 2016 Final EIS and December 2016 ROD, violated NEPA;

- 317. Declare that the Corps' failure as part of the 2015 decision-making process to complete a formal ESA section 7 consultation on its 2015 authorization of the construction, funding, and implementation of the Bypass Channel Alternative for the Intake Project and ensure that the Project will not jeopardize the pallid sturgeon violated ESA section 7(a)(2), 16 U.S.C. § 1536(a)(2);
- 318. Declare that Reclamation's reliance on the July 10, 2015 and November 18, 2016 Biological Opinions concerning implementation of the Bypass Channel Alternative for the Intake Project to ensure that the Project will not jeopardize the pallid sturgeon violates ESA section 7(a)(2), 16 U.S.C. § 1536(a)(2);
- 319. Declare that the Corps' June 18, 2015 Statement of Findings and October 2016 CWA Analysis authorizing the discharge of fill associated with construction of the Intake Project violate section 404 of the CWA, 33 U.S.C. § 1344;
- 320. Declare that FWS' July 10, 2015 and November 18, 2016 Biological Opinions and Incidental Take Statements approving the Intake Project violate Section of the ESA, 16 U.S.C. § 1536(a)(2) and (b)(4), and the APA;

- 321. Order the Corps to cease its ongoing unlawful "take" of the pallid sturgeon at Fort Peck Dam, pursuant to ESA section 9(a)(1)(B), 16 U.S.C. § 1538(a)(1)(B);
- 322. Order the Corps to comply with the requirements in the 2003 Biological Opinion and Reasonable and Prudent Alternative relating to modifications at Fort Peck Dam for the benefit of pallid sturgeon;
- 323. Order Reclamation to cease its ongoing unlawful "take" of the pallid sturgeon at Intake Dam, pursuant to ESA section 9(a)(1)(B), 16 U.S.C. § 1538(a)(1)(B);
- 324. Order Reclamation to initiate and complete a new formal consultation pursuant to ESA section 7(a)(2), 16 U.S.C. § 1536(a)(2), regarding its operation of Intake Dam within six months and prior to foreclosing the formulation or implementation of any reasonable and prudent alternatives under Section 7(d) of the ESA;
- 325. Set aside and remand the April 2015 FONSI and Final Supplemental EA, as well as the October 2016 EIS and December 2016 ROD, for the Intake Project;

- 326. Set aside and remand the July 10, 2015 and November 18, 2016

 Biological Opinions and Incidental Take Statements on the current operation of the Intake Dam and the proposed Intake Project;
- 327. Set aside and remand the June 18, 2015 CWA section 404 Statement of Findings and the October 2016 CWA Analysis for the Intake Project;
- 328. Award plaintiffs their reasonable fees, costs, and expenses, including attorney fees, associated with this litigation pursuant to the attorney's fees provision of the ESA, 16 U.S.C. § 1540(g), and/or the Equal Access to Justice Act, 28 U.S.C. § 2412; and
- 329. Grant plaintiffs such further and additional relief as the Court may deem just and proper.

DATED: April 20, 2017 Respectfully submitted,

/s/McCrystie Adams

McCrystie Adams (CO Bar # 34121) Defenders of Wildlife 535 16th Street, Suite 310 Denver, CO 80202 madams@defenders.org

/s/William S. Eubanks II

William S. Eubanks II (CO Bar #49410) Meyer Glitzenstein & Eubanks LLP 2601 S. Lemay Avenue Unit 7-240 Fort Collins, CO 80525 beubanks@meyerglitz.com

/s/Michelle Uberuaga__

Michelle Uberuaga (MT Bar #11611) Law Office of Michelle Uberuaga Z., PLLC P.O. Box 711 Livingston, MT 59047 (406) 223-4714 michelle.uberuaga@gmail.com